

8159
2/1/57

CITY AND COUNTY OF BRISTOL



THE
HEALTH OF BRISTOL
IN
1957

R. C. WOFINDEN
M.D., B.S., D.P.H., D.P.A.
Medical Officer of Health

63909



THE HEALTH OF BRISTOL IN 1957

CONTENTS

The report is published in six sections (A—F). Each section is paged separately with the section indicated by a capital letter printed over the page number. Most of the sections have a separate index of contents. The beginning of each section is indicated by a coloured contents page.

	SECTION AND PAGE
GENERAL REVIEW OF THE HEALTH OF BRISTOL IN 1957	A
Introduction	1
Summary of Vital Statistics	9
Prevalence and Control of Infectious Diseases	22
Employment in the Bristol Area	27
The Weather in 1957	29
PERSONAL HEALTH SERVICES	B
MATERNAL AND CHILD WELFARE, NURSING AND ALLIED SERVICES	
Maternity Services	1
Domiciliary Service of Midwives	4
Sub-Fertility Clinic	4
Child Welfare Services	5
Dental Care	6
Day Nurseries	6
Clinic for Backward Children	7
The Health Visiting Service	7
Health Visitor Training	11
Home Nursing Service	11
The Home Help Service	12
Welfare of Unmarried Mothers	14
Special Families	14
Statistics	17
Vaccination against Poliomyelitis	19
Inoculations	21
Smallpox Vaccination	21
Dispensary	22
THE MENTAL HEALTH SERVICES	23
PREVENTION OF ILLNESS, CARE AND AFTER-CARE	
Tuberculosis	41
Venereal Diseases	43
THE AMBULANCE SERVICE	47
ENVIRONMENTAL HEALTH SERVICES	C
Sanitary Circumstances	1
Administration of the Shops Act, etc.	41
Report of the Public Analyst	45
PORT HEALTH SERVICE	D
	1-22
SPECIAL REPORTS	E
The William Budd Health Centre	1
Health Education	6
The Diseases of Animals Act	15
Civil Defence Responsibilities of the Medical Officer of Health	16
SCHOOL HEALTH SERVICE	F
	1-67

GENERAL REVIEW OF THE HEALTH OF BRISTOL 1957

	Section A	<i>Page</i>
Medical Officer of Health's Introduction		1
Summary of Vital Statistics		9
Prevalence and Control of Infectious Diseases		22
Employment in the Bristol Area		27
The Weather in 1957		29

ANNUAL REPORT 1957

My Lord Mayor, Ladies and Gentlemen,

I have the honour to present my second annual report on the health of the City of Bristol for the year 1957.

It was a year of further improvement in the health record of the citizens and steady progress was made in the development of the health services. The various aspects of the work are dealt with in detail in the different sections of the report but the preamble directs attention to some of the more important events or developments during the year.

Vital Statistics

The live birth rate in the City rose to 15·89 per 1,000 compared with 14·99 in 1956. This increase, which is in common with a similar increase in England and Wales generally, and a local increase in the adjacent counties, has led to greater demand for maternity hospital beds. This has had repercussions on the City's domiciliary maternity service and is referred to later in the report.

The stillbirth rate showed a welcome fall to 22·12 per 1,000 compared with the previous year's 24·86 and now the rate is below that of England and Wales which is 22·5 per 1,000.

The adjusted death rate was 10·61 per 1,000, a slight reduction on that for 1956 (10·78) but well below the rate for England and Wales (11·5).

The infant mortality rate of 18·33 per 1,000 is the lowest ever recorded for the City and compares remarkably well with that for England and Wales at 23·1 per 1,000. This is a fine record for a large industrial city and is a tribute not only to the very good social and environmental circumstances enjoyed by the population but also to the high level of medical and nursing skill of all those responsible for the maternity and paediatric services. There was also a welcome fall in the death rate of children under 4 weeks which this year was 13·75 compared with 14·54 in 1956. The 1957 rate for England and Wales is 16·5 per 1,000.

There was only one maternal death, the lady dying from a pathological condition arising from a pregnancy in 1948.

Deaths from tuberculosis continued to show a steady fall during the year and with a rate of 0·07 per 1,000 population Bristol has one of the lowest death rates from respiratory tuberculosis of any of the large towns in the British Isles.

Prevalence of Infectious Diseases and their Prevention

In accordance with expectations 1957 was a "measles year" with 7,119 cases—fortunately no deaths occurred—the peak of the epidemic being in June. The incidence of dysentery (93 cases) was the lowest recorded since 1949; in 1956 the highest incidence for seven years had been recorded. The commonest notified form of dysentery is the mild Sonné type which is known more for its nuisance value than as a menace to life. As in previous years the disease was most prevalent in school children living on the newer housing estates.

For the eighth successive year there were no confirmed cases of diphtheria in the City, and for the eleventh consecutive year there were no deaths from this disease.

Ninety-eight cases of poliomyelitis, seventy of which were paralytic, were notified in 1957; 65 of the total cases were children under school-leaving age. The poliomyelitis vaccination scheme was continued during 1957 but the uncertainty and inadequacy of supplies limited the progress of the campaign.

During the year 14,850 children completed a course of vaccination at local health authority clinics. The total number of children registered by the end of the year was 51,619 (i.e., just over half of those eligible for registration).

The lowest number of food infections—143—was recorded since 1952. *Salmonella typhimurium* continued to be the commonest cause and the possibility of its widespread dissemination in imported foodstuffs is discussed in the section of the report dealing with port health.

In the last quarter of the year, in common with other parts of the country, the City was subjected to an epidemic of Influenza "A," popularly known as "Asian Influenza." Infection first reached the City at the port of Avonmouth in the m.v. *Clan Chattan*, which arrived on 23rd June from Calcutta via Port Said, Colombo, Rotterdam and Tilbury. Three members of the crew were taken ill at Tilbury on 17th June with headache, sore throat, joint pains and a painful cough. Thereafter there was a quick spread of infection throughout the crew and on the 23rd June the port medical officer found 25 out of 37 members ill. Virus "A" was subsequently found to be the cause of the illness. The ship did not stay in port very long and the infection gained no entrance into the City. This was probably the first recorded incident of "Asian flu" in this country but did not cause the epidemic which reached the City later. Towards the end of the year influenza vaccine was made available by the Ministry of Health to certain vulnerable groups—doctors, nurses, ambulance personnel, etc.; about 300 persons were vaccinated. So far as is known the vaccination programme was too limited in numbers and came too late to affect the epidemic.

Cremation

Nineteen fifty-seven was the first full year of operation of the City's new Crematorium at Canford Lane. The Council and the Home Office approved the Medical Officer of Health as cremation referee and the Deputy Medical Officer of Health and Chief Assistant Medical Officer of Health as deputy referees. This is responsible and time-consuming work although it saves the City a good deal of money. Altogether 1,054 cremations were carried out of which 750 were of Bristol residents. Although a private crematorium has been operating in the City for many years it is expected that the provision of this new crematorium will encourage even more this hygienic method of disposal of human remains. It is not possible at present to give a figure for the proportion of Bristol deaths where the remains were disposed of by cremation for figures from the private crematorium are not available. With this increase in facilities we should be insured, even in spite of land shortage, from a return to the position the City was in in 1846 when the Health of Towns Commission reported all the cemeteries "overfull with rotting corpses."

Home Nursing

The home nursing service continues to be provided on an agency basis by the Bristol District Nursing Association and functions well. During the year your statistician (Miss Duncan) and the Chief Superintendent of the Association (Miss Grazier) developed a system of nursing records which has subsequently been adopted by other local health authorities in many other parts of the country.

Maternal and Child Health

Mention has already been made of the increased birth rate in 1957. Pressure on maternity hospital bed accommodation has increased in consequence. Moreover, during the nine years that the National Health Service has been in operation the hospitals in Bristol have admitted an increasing

proportion of outside-City cases; for example, whereas in 1952 only 16 per cent. of the maternity admissions were outside City cases, by 1957 this figure had grown to 22 per cent. These trends have led to some overcrowding of the local maternity units and the earlier discharge of patients to their own homes. The ubiquitous antibiotic-resistant hospital staphylococcus at last gained a hold in one of the maternity units and the relief of overcrowding became urgently necessary. In default of the provision of more maternity beds—an unlikely event in the near future—the only way this overcrowding can be relieved is by confining more women at home. Improving housing conditions make this a more feasible proposition than ten years ago but the increased expense to the mother of a home confinement stimulates her desire to get into hospital. In view of these events more home investigations, more home bookings, deliveries and nursings have been undertaken by your domiciliary midwives. More district midwives were needed in consequence and owing to difficulties in the recruitment of full-time workers, part-time midwives had to be engaged from September onwards.

During the year the Ministry of Health issued two important reports—one on maternal deaths and the other on ante-natal care and toxæmia of pregnancy (a condition which nowadays is the chief cause of maternal death). Discussions took place on the latter report between the Local Health Authority, the Regional Hospital Board, the Board of Governors of the United Bristol Hospitals and the Local Medical Committee to review ante-natal practice in the City and to make adjustments where necessary. It should be recorded, however, that no Bristol mother has died from toxæmia for the past four years. One of the results of these discussions has been for the Health Committee to agree to reduced charges for home helps in approved cases where it is essential for the expectant mother to rest at home.

The Bristol Health Department in association with the hospitals carried out in October a pilot trial for a peri-natal (i.e., stillbirths and first-week deaths) inquiry being sponsored by the National Birthday Trust. Valuable lessons were learnt from this pilot and the nation-wide inquiry, which is to take place next year, has been modified in consequence.

In the main body of the report there is included a short history of the growth and development of ante-natal care in Bristol and also of the growth and work of parentcraft clubs.

This has been the first complete year of operation of the City's six area case committees set up to collaborate with the central case committee for the consideration of special families. An account of this work is given in the section on maternal and child health.

Health Education

I mentioned in last year's annual report that health education was one of the growing points of public health and every effort has been made during the year to increase such activities by almost all field members of the department. These efforts can be divided broadly into two groups—by educating the educators and by educating members of the public. Under the first group would be included all the teaching to medical under- and post-graduates, health visitors and social science students, midwives and midwife teachers, public health inspectors and home nurses and the refresher courses, organised in association with the University Department of Public Health, for public health inspectors, health visitors, mental health workers, school medical officers, school teachers and the like. Such contributions should not be minimised or considered as only the training of these skilled personnel in the health fields to pass the necessary

examination. The object is to try to imbue them with a preventive outlook and philosophy and to equip them with the necessary knowledge to continue spreading the gospel. With regard to this group a welcome new departure has been the increased opportunities, with the co-operation of the local hospitals, to teach the hospital nurses something of the group health approach and of preventive medicine.

The efforts on behalf of the general public have been widespread and continuous with lectures, talks, demonstrations and exhibitions being given to almost every type of organisation in the City and the demand for health information from such groups seems to be inexhaustible.

The health bulletin which has been published monthly since October 1956 has been a continued success. Information is provided on the health of Bristol citizens, on the health services provided for them and commentaries on a variety of health matters and health hazards. The bulletin now has a wide circulation including several foreign countries.

During the year the Ministry of Health asked Local Health Authorities to make known to the public the statistical data relating to smoking and carcinoma of the bronchus. This the Health Committee did but not on a continuing propaganda basis. It was thought that a distinction must be made between true education and propaganda. The effects of the latter are generally short-lived and in the matter of changing smoking habits would be of little lasting value. It was decided therefore to concentrate on education in the schools and arrangements were made in association with the Local Education Authority and the University Institute of Education to run an annual course for selected school teachers whose function it will be to foster health education in schools. The effects of smoking on health would be only one aspect of such a health education programme which is aimed more at teaching a "way of life." The long-term aspect of such an approach is obvious but it is thought it will prove to be a much more effective way of achieving the purpose in mind.

One of the most interesting undertakings of the year was the organisation of two conferences, in association with the Central Council of Physical Recreation, in order to demonstrate to women's organisations the technique of doing housework without strain. An account of this is given in the section of the report dealing with health education. Suffice to say here that the conference, and the developments arising out of it, have exceeded the most optimistic expectations.

In 1956, it was decided to set up a Home Safety Council under the auspices of the Health Committee. During 1957 the Council had its first full year of work. It increased tremendously home safety activities and now has a panel of volunteer speakers who have been keen and active in spreading knowledge of home hazards. In addition the Council has organised exhibitions and devoted "weeks" to propaganda campaigns on burns and scalds and other types of home accidents.

Bristol continues to be a favourite centre for overseas health workers and during the year we were pleased to welcome and explain some of the City's health activities to 46 professional visitors from 26 different countries.

Mental Health

The development of the mental health services was carried a stage further by the partial implementation of the Health Committee's scheme for the prevention of mental ill-health. A part-time psychiatrist and two of the five psychiatric social workers had been recruited by the end of the year and thereby the in-service training of the staff was increased.

Efforts were made by the Health Committee to provide a hostel for high-grade male mental defectives capable of earning their living in the community. At the request of the Ministry of Health the Committee withdrew their scheme which would have meant the Regional Hospital Board relinquishing the tenancy of Mortimer House and consequently reducing the maternity bed accommodation. Suitable alternative premises were still being sought by the end of the year. These efforts provoked much public controversy about the wisdom of allowing hospital-discharged defectives to live in hostels in the open community. No doubt this controversy, much of which was ill-informed, was intensified by one or two unfortunate incidents in the country to which much publicity was given. It is rather ironical that these events should have coincided with the publication of the report of the Royal Commission on the Law relating to Mental Illness and Mental Deficiency wherein a plea is made for the provision of such hostels as the Committee had in mind. This report, if implemented, will lead to far-reaching changes in the approach to the problem of mental ill-health and foreshadows considerably increased responsibilities not only for the local health authority but also for the general public. Without the full backing of public opinion many of the Commission's recommendations will be still-born.

Plans were also drawn up during the year for the provision of a new occupation centre to replace the existing worn-out buildings in Marlborough Hill. There is every reason why children attending occupation centres should be not less well housed than their more fortunate brethren now attending the many new schools provided in the City.

Port Health

One of the outstanding events of the year was the holding of the Annual Conference of the Association of Sea and Air Port Health Authorities in Bristol with the Chairman of the Health Committee, Alderman Milton, as the President. This is only the second occasion on which the Conference had been held in Bristol, the previous visit being over thirty years ago. Scientific papers were contributed by members of the Department and a debt of gratitude is due to the Docks Committee, the Bristol Aeroplane Company, Long Ashton Research Station and Messrs. Harveys for permission to visit their premises and for their hospitality.

Accounts of the first entry in 1957 of "Asian Flu" into the country at Avonmouth and the efforts made to protect the public from the use of infected imported egg are given in the section of the report dealing with Sea and Air Port Health.

During 1957 Lulsgate Airport was opened in place of Whitchurch and your officers continue to be responsible for all airport health arrangements. It is expected that the gradual increase in the use of this new airport will lead to increased responsibilities in this field.

Environmental Health

Progress was made during the year in the delineation and the preliminary survey of a smoke control area under the Clean Air Act but it is not expected that the work will be completed and an Order made before 1959.

Further and more rapid progress was made in the City's campaign of clearing some 10,000 slum houses and by the end of 1957 some 3,713 houses had been dealt with of which 272 had been demolished.

The Windscale nuclear incident in October 1957 was a forcible reminder of a new hazard to health from man-made radiation. Responsibility for the

control and supervision of radioactive hazards is divided between at least three central authorities and no responsibility seems to have been placed on any local body in regard to these matters. However, having regard to the fact that the Sanitary Officers (Outside London) Regulations place a general duty on the Medical Officer of Health to keep himself informed and to advise on all matters affecting or likely to affect the public health, it is obvious that this is one aspect of environmental health which will need to be watched closely in the future. One of the first needs, which has been appreciated by the Society of Medical Officers of Health in organising a professional course on this problem, is to build up a well-informed staff within local health departments. It is hoped that in due time it will be possible to organise a local course with this object in view.

Capital Developments

Financial restrictions during the year led to a complete cessation of capital developments. No new clinics were started, and the provision of the new ambulance station, new occupation centre and hostel for mental defectives and new administrative headquarters remained in abeyance.

Staff Recruitment

The shortage of health visitors continued and full-time midwives and psychiatric social workers were difficult to recruit. On the other hand, the public health inspectorial staff was strengthened considerably during the year thus facilitating the work on slum clearance and the implementation of the food hygiene regulations.

It is with deep regret that I place on record the death of Alderman G. A. Watson Allan, the deputy Chairman of the Health Committee for so many years. His work on the City Council and the Health Committee was outstanding and his wise counsel and guidance will greatly be missed.

In conclusion I would like to place on record my thanks for the support I have received from the Chairman and members of the Health Committee and City Council. My sincere thanks are also given to the Town Clerk, Chief Officers of the Corporation and to all members of my own staff, without whose enthusiastic and loyal co-operation the splendid health record of the City could not have been maintained.

I am,

Your obedient servant,

R. C. WOFINDEN,

Medical Officer of Health.

THE HEALTH COMMITTEE 1957

Chairman:

Alderman J. J. MILTON

Vice-Chairman:

G. A. WATSON ALLAN, J.P. (d. Aug. 1957)

Mr. W. H. ENGLAND (Oct. 1957)

Alderman:

Mrs. A. E. NUTT

Councillors:

A. B. ABRAMS (Nov. 1957)

Mrs. A. M. CHAMBERLAIN

W. W. CLOTHIER

B. J. M. DAVIES

J. D. FISK

G. P. C. FORD

S. T. GAMLIN

R. J. B. GAY

Mrs. P. M. JACOB

Mrs. E. KEIGHT (resigned Nov. 1957)

W. J. MUNSLOW

H. J. G. SKEATES

Miss J. STEPHEN

PUBLIC HEALTH STAFF, 1957

Medical Officer of Health (City, Port and Schools): R. C. WOFINDEN,
M.D., B.S., D.P.H., D.P.A.

Deputy Medical Officer of Health: P. G. ROADS, M.D., B.S., D.P.H.

Principal Assistants

Chief Assistant Medical Officer of Health and Senior Medical Officer for Mental Health: H. TEMPLE PHILLIPS, M.D., B.S., D.I.H., D.C.H., D.P.H.

Senior Medical Officer—Port: D. T. RICHARDS, M.R.C.S., L.R.C.P., D.P.H.

Senior Medical Officer—School Health Service: A. L. SMALLWOOD, M.D., CH.B.,
D.C.H., D.P.H.

Senior Medical Officer—Maternal and Child Welfare: SARAH C. B. WALKER,
M.D., B.S., D.P.H.

Senior Medical Officer—Tuberculosis: A. M. MCFARLAN, M.A., M.B., B.CH.

Senior Dental Officer: W. H. B. STRIDE, L.D.S.

Chief Public Health Inspector: F. J. REDSTONE, F.R.S.H., F.A.P.H.I.

Chief Administrative Officer: P. J. ROOM.

Chief Nursing Officer: Miss L. M. BENDALL.

Technical Officers

Health Education Officer: P. MACKINTOSH, B.A.

Technical Assistant—Health Education: Miss M. C. FINCH, M.A.

Statistician and Records Officer: Miss E. H. L. DUNCAN, M.A., B.SC.

Assistant Records Officer: Miss A. WYATT.

Nutritionist: Miss M. CHAPMAN.

Chief Pharmacist: F. H. RAWLINGS, M.P.S., D.P.A.

Consultant Bacteriologist

Professor K. E. COOPER, B.SC., PH.D., M.R.C.S., L.R.C.P., A.I.C.

Deputy Consulting Bacteriologist

H. R. CAYTON, M.B., CH.B.

Public Analyst

E. G. WHITTLE, B.SC., F.R.I.C.

SUMMARY OF VITAL STATISTICS

Population

The Registrar General has estimated the home population (including H.M. Forces stationed in the area) at mid-year 1957 to be 439,600, a decrease of 900 from that for the previous year. The rates for 1957 are based upon this estimated figure.

The figures given in the following tables for births, stillbirths, and deaths (but not marriages) are those allocated by the Registrar General to Bristol as registered during the respective years and corrected for inward and outward transfers according to residence.

	1956	1957
Estimated home population (mid-year)	440,500	439,600
Marriages	3,581	3,446
Rate (persons married) per 1,000 population ..	16.26	15.68
Births registered during year	6,669	6,984
Rate per 1,000 population	15.14	15.89
Rate per 1,000 population adjusted (ACF. 1957 1.00)	14.99	15.89
Stillbirths registered during year	170	158
Rate per 1,000 total births	24.86	22.12
Deaths registered during year	5,395	5,184
Crude rate per 1,000 population	12.25	11.79
Adjusted rate per 1,000 population (ACF. 1957 0.90)	10.78	10.61
Natural increase (per 1,000 population)	2.89	4.09
Deaths under one year registered during year ..	129	128
Rate per 1,000 live births registered during year	19.34	18.33
Deaths under four weeks registered during year ..	97	96
Rate per 1,000 live births registered during year	14.54	13.75
Deaths from puerperal causes registered during year	2	1
Rate per 1,000 total births registered during year	0.29	0.14

Marriages

	<i>Number of marriages during year</i>	<i>Rate persons married per 1,000 popn.</i>
1957	3,446	15.68
1956	3,581	16.26
1955	3,535	15.98
1954	3,377	15.18
1953	3,460	15.58
1952	3,585	16.15
1951	3,506	15.88
1950	3,512	15.87
1949	3,783	17.20
1948	3,786	17.41

Births

	Year								
	1950	1951	1952	1953	1954	1955	1956	1957	
Total live births registered in Bristol (not corrected for residence)	7,833	7,536	7,635	7,719	7,588	7,469	7,714	8,302	
Non-citizen registered births in Bristol (included in above)	956	897	988	1,025	1,168	1,215	1,354	1,578	
Births registered in Bristol—citizens only ..	6,877	6,639	6,647	6,694	6,420	6,254	6,360	6,724	
Births to Bristol citizens—registered outside the City	219	233	113	251	271	277	309	260	
R.G.'s corrected figure—Registered live births (Bristol citizens)	7,096	6,872	6,760	6,945	6,691	6,531	6,669	6,984	
Birth rate per 1,000 total population ..	16.03	15.56	15.23	15.63	15.04	14.76	15.14	15.89	

Illegitimacy (Rate: 48 per 1,000 live births registered during year)

	1956	1957
Total illegitimate live births registered in Bristol (not corrected for residence)	388	484
Non-citizen illegitimate births registered in Bristol (included in above)	123	149
Non-citizen percentage of total illegitimate live births registered in Bristol	31·7	30·8
Registrar General's total. Illegitimate registered live births (corrected for residence)	293	335
As percentage of R.G.'s corrected Bristol live births registered during the year	4·4	4·8

Stillbirths Total No. (corrected by R.G. for residence) registered during 1957—158 (1956—170). Rate: 22·1 per 1,000 total births registered.

Deaths Rate: (Crude) 11·79 per 1,000 population
(Adjusted) 10·61 per 1,000 population (Area Comparability Factor 0·90)

During 1957 the total number of deaths actually *occurring* in Bristol within the year was 5,755 of which 782 were of non-citizens. The number of inward transfers in respect of citizens who died outside the City area was 213.

The Registrar General's corrected figure for deaths of Bristol citizens *registered* during 1957 is 5,184 and the crude death rate is 11·79 per 1,000 population. Comparable figures of Registrar General for 1956—5,395 deaths and the rate—12·25.

Natural Increase Rate: 4·09 per 1,000 population.

	1956	1957
Bristol births registered during year	6,669	6,984
Bristol deaths registered during year	5,395	5,184
Natural increase	+1,274	+1,800

Infant Mortality (Total deaths of Bristol citizens under 1 year of age registered in 1957—128).

(Rate: 18 per 1,000 live births registered in 1957.

	1956	1957
Total deaths under one year of age registered in Bristol ..	198	190
Non-citizens included in above	71	69
Total infant deaths allocated to Bristol (R.G.'s corrected figure)	129	128
Rate per 1,000 registered live births	19·34	18·33

The infant mortality rate for 1957 replaces the 1955 rate as the lowest ever recorded in the City.

	1957	1956	1955	1954	1953	1952	1951	1950
Legitimate infant mortality rate per 1,000 legitimate live births registered in the year ..	18	20	19	21	22	21	20	23
Illegitimate infant mortality rate per 1,000 illegitimate live births registered in the year ..	24	14	25	22	13	33	25	29

Neo-Natal Deaths (i.e., deaths under four weeks of age). Registered during 1957—96. Rate: 13·75 per 1,000 live births registered in 1957.

During 1957 the deaths of 149 babies during the first four weeks of life were registered in Bristol; 55 were non-citizens. Comparable figures for the year 1956 are—154 including 58 non-citizens. After correction by the Registrar General in respect of residence, the 1957 registered figure becomes 96 compared with 97 in 1956. The deaths in this age group, after correction, represent 75 per cent. of the total infants dying under one year of age (75 per cent. in 1956). Of the total neo-natal deaths in 1957 (uncorrected for transfers) 75 (50 per cent. approx.) occurred on the first day of life and 55 (37 per cent. approx.) during the remainder of the first week. In 1956 comparable figures are respectively 42 and 44 per cent.

In 1957, after correction for transfers, 48 deaths occurred on the first day and 36 in the remainder of the first week.

For 1957, of the corrected total of 96 neo-natal deaths, 5 were of illegitimate babies. This gives a legitimate neo-natal mortality rate of 13·7 per 1,000 legitimate live births registered in 1957 and an illegitimate neo-natal mortality rate of 14·9 per 1,000 illegitimate live births registered in 1957.

Maternal Mortality (Number of deaths—1). Rate: 0·14 per 1,000 total births (live and still) registered during the year.

The one maternal death registered in the City during 1957 was that of a woman of 53 years of age whose last pregnancy was in 1948 and who suffered pre-eclamptic toxæmia of pregnancy.

VITAL STATISTICS

TABLE I. Supplied by the Registrar General

Population, marriages, births, deaths, natural increase, infant mortality—for Calendar Year 1957 and previous six years—
(Registrations during year)

	1957	1956	1955	1954	1953	1952	1951
Estimated population (mid-year) * { Home 439,600 440,500 442,500 444,900 444,200 443,900 †442,700 Constructed .. — — — — — — 441,650							
Marriages							
Number 3,446 3,581 3,535 3,377 3,460 3,585 3,506							
Rate persons married per 1,000 pop. * { Home 15·68 16·26 15·98 15·18 15·58 16·15 15·84 Constructed .. — — — — — — 15·88							
Birth registrations:							
Legitimate—males 3,444 3,271 3,216 3,298 3,365 3,249 3,335							
females 3,205 3,105 3,030 3,075 3,271 3,209 3,255							
Illegitimate—males 166 150 152 158 141 156 144							
females 169 143 133 160 168 146 138							
Total 6,984 6,669 6,531 6,691 6,945 6,760 6,872							
Rate per 1,000 population .. 15·89 15·14 14·76 15·04 15·63 15·23 15·52							
Rate per 1,000 pop. (constructed)* .. — — — — — — 15·56							
Stillbirth registrations:							
Legitimate—males 73 85 66 72 64 77 72							
females 78 72 57 81 55 61 70							
Illegitimate—males 5 4 6 2 4 4 8							
females 2 9 6 5 3 2 5							
Total 158 170 135 160 126 144 155							
Rate per 1,000 total births .. 22 25 20 23 18 21 22							
Death registrations:							
Males 2,586 2,727 2,647 2,583 2,591 2,504 2,783							
Females 2,598 2,668 2,561 2,582 2,555 2,467 2,840							
Total 5,184 5,395 5,208 5,165 5,146 4,971 5,623							
Rate per 1,000 population .. 11·79 12·25 11·77 11·61 11·58 11·20 12·70							
Rate per 1,000 pop. (constructed)* .. — — — — — — 12·73							
Natural increase per 1,000 population .. 4·09 2·89 2·99 3·43 4·05 4·03 2·82							
„ „ „ (constructed)* .. — — — — — — 2·83							
Deaths under one year (registered):							
Legitimate 120 125 118 132 148 135 133							
Rate per 1,000 legitimate live births .. 18 20 19 21 22 21 20							
Illegitimate 8 4 7 7 4 10 7							
Rate per 1,000 illegitimate live births .. 24 14 25 22 13 33 25							
Total deaths 128 129 125 139 153 145 140							
Rate per 1,000 live births .. 18 19 19 21 22 21 20							
Deaths under four weeks:							
Total deaths 96 97 83 106 105 102 92							
Rate per 1,000 live births .. 14 15 13 16 15 15 13							
Diarrhoea and enteritis (under two years):							
Deaths 3 2 3 1 3 2 4							
Rate per 1,000 live births .. 0·43 0·30 0·46 0·15 0·43 0·30 0·58							
Maternal mortality:							
Deaths from:—							
Sepsis of pregnancy, childbirth and the puerperium — 1 1 1 1 — —							
Abortion with toxæmia — — — 1 1 — —							
Other toxæmias of pregnancy and the puerperium 1 — — 1 — 4 1							
Haemorrhage of pregnancy and childbirth — — — — 1 — 1							
Abortion without mention of sepsis or toxæmia — — — — — 1 —							
Abortion with sepsis — — — — 2 1 1							
Other complications of pregnancy, childbirth and the puerperium — 1 1 1 2 1 4							
Total deaths 1 2 2 4 7 7 7							
Rate per 1,000 total births .. 0·140 0·292 0·300 0·584 0·989 1·01 0·996							

* The Registrar General's constructed population for use in the computation of rates for the year which combine "before boundary change" and "after boundary change" figures.

† Relates to the area as constituted at midyear (subsequent to boundary changes).

TABLE 2. Supplied by the Registrar General

Birth-rates, death-rates, analysis of mortality, maternal mortality
and case-rates for certain infectious diseases in the year 1957

(Provisional figures based on quarterly returns)

								BRISTOL		ENGLAND & WALES				
								Rates per 1,000 Home Population	Rates per 1,000 Total Births (Live & Still)	Rates per 1,000 Home Population	Rates per 1,000 Total Births (Live & Still)			
Birth Registrations:														
Live	..	..	..	..	..	..	..	15.9		16.1				
Still	..	..	..	..	..	..	..	22.1			22.4			
Death Registrations														
ALL CAUSES (Crude)								..	..	..	..	11.8		11.5
(Adjusted)								..	..	..	..	10.6		
Typhoid and paratyphoid fevers								..	..	..	..	—
Whooping Cough								..	..	..	..	0.00		
Diphtheria								..	..	..	..	—
Tuberculosis								..	..	..	..	0.08		0.11
Influenza								..	..	..	..	0.17		
Smallpox								..	..	..	..	—
Acute poliomyelitis (including polioencephalitis)								..	..	..	..	0.00		
Pneumonia								..	..	..	..	0.68		
Notifications (Corrected):														
Typhoid fever								..	..	..	..	0.00		
Paratyphoid								..	..	..	..	—
Meningococcal infection								..	..	..	..	0.03		
Scarlet fever								..	..	..	..	0.74		
Whooping cough								..	..	..	..	2.29		
Diphtheria								..	..	..	..	—
Erysipelas								..	..	..	..	0.14		
Smallpox								..	..	..	..	—
Measles								..	..	..	..	16.17		
Pneumonia								..	..	..	..	1.64		
Acute poliomyelitis (including polioencephalitis):—														
Paralytic								..	..	..	..	0.16		
Non-paralytic								..	..	..	..	0.06		
Food poisoning								..	..	..	..	0.33		
Puerperal pyrexia								..	..	..	..		24.78	

(b)—per 1,000 related live births.

TABLE 3. Compiled from figures supplied by the Registrar General

**Total deaths by cause and age registered during
Calendar Year 1957**

DISEASE					Sex	All ages	0-	1-	5-	15-	45-	65-	75 & over
All Causes					M	2,586	66	10	16	129	751	712	902
					F	2,598	62	7	12	84	432	624	1,377
1.	T.B. Respiratory				M	23	—	—	—	3	9	8	3
					F	8	—	—	—	4	3	—	1
2.	T.B. Other				M	2	—	—	1	—	1	—	—
					F	3	—	—	—	—	1	2	—
3.	Syphilitic Disease				M	6	—	—	—	—	4	1	1
					F	2	—	—	—	—	2	—	—
4.	Diphtheria				M	—	—	—	—	—	—	—	—
					F	—	—	—	—	—	—	—	—
5.	Whooping Cough				M	—	—	—	—	—	—	—	—
					F	1	1	—	—	—	—	—	—
6.	Meningococcal Infection				M	1	—	—	—	—	1	—	—
					F	—	—	—	—	—	—	—	—
7.	Acute Poliomyelitis				M	—	—	—	—	—	—	—	—
					F	2	—	—	1	1	—	—	—
8.	Measles				M	—	—	—	—	—	—	—	—
					F	—	—	—	—	—	—	—	—
9.	Other Infective and Parasitic Diseases ..				M	5	—	—	—	1	3	1	—
					F	3	—	—	—	1	1	—	1
10.	Malignant Neoplasm of Stomach ..				M	94	—	—	—	2	41	29	22
					F	58	—	—	—	2	17	22	17
11.	„ „ „ Lung, Bronchus				M	167	—	—	—	4	97	50	16
					F	25	—	—	—	2	13	5	5
12.	„ „ „ Breast				M	1	—	—	—	—	—	1	—
					F	85	—	—	—	8	40	20	17
13.	„ „ „ Uterus				F	40	—	—	—	5	15	10	10
14.	„ „ „ Other & Lymph. Neoplasms ..				M	210	—	1	—	11	61	64	73
					F	213	—	—	—	9	64	56	84
15.	Leukaemia, Aleukaemia				M	12	—	—	—	3	5	2	2
					F	11	1	—	1	1	5	1	2
16.	Diabetes				M	5	—	—	—	1	—	—	4
					F	22	—	—	—	—	5	7	10
17.	Vascular Lesions of Nervous System ..				M	294	—	—	—	3	56	95	140
					F	455	—	—	1	11	53	120	270
18.	Coronary Disease, Angina				M	528	—	—	—	28	191	163	146
					F	313	—	—	—	1	45	103	164
19.	Hypertension with Heart Disease ..				M	75	—	—	—	3	24	21	27
					F	92	—	—	—	1	20	27	44
20.	Other Heart Disease				M	281	—	—	—	8	38	57	178
					F	479	—	—	—	8	50	78	343
21.	Other Circulatory Disease				M	130	—	—	—	3	25	23	79
					F	198	—	—	1	1	13	43	140
22.	Influenza				M	39	—	1	—	4	11	13	10
					F	36	—	—	—	3	9	7	17
23.	Pneumonia (including Pneu. of Newborn)				M	144	12	1	2	3	21	35	70
					F	156	7	1	1	2	12	40	93
24.	Bronchitis				M	170	—	—	—	3	54	69	44
					F	66	—	—	—	1	3	18	44
25.	Other Diseases of Respiratory System ..				M	54	—	—	—	2	29	19	4
					F	16	—	—	—	—	3	3	10
26.	Ulcer of Stomach and Duodenum ..				M	24	—	—	—	—	8	6	10
					F	19	—	—	—	—	2	10	7
27.	Gastritis, Enteritis and Diarrhoea ..				M	8	2	—	—	—	4	1	1
					F	12	1	—	—	1	2	3	5
28.	Nephritis and Nephrosis				M	13	—	1	1	2	1	7	1
					F	14	—	—	—	1	—	9	4
29.	Hyperplasia of Prostate				M	32	—	—	—	—	2	7	23
30.	Pregnancy, Childbirth, Abortion ..				F	1	—	—	—	—	1	—	—
31.	Congenital Malformations				M	21	9	2	2	4	4	—	—
					F	26	18	2	1	—	4	1	—
32.	Other Defined and Ill-Defined Diseases ..				M	154	43	2	3	16	35	28	27
					F	167	33	3	3	12	32	29	55
33.	Motor Vehicle Accidents				M	25	—	—	—	3	7	4	7
					F	9	—	—	2	1	2	—	4
34.	All other Accidents				M	45	—	2	3	14	9	4	13
					F	40	1	1	—	3	3	3	29
35.	Suicide				M	22	—	—	—	4	13	4	1
					F	23	—	—	—	5	10	7	1
36.	Homicide and Operations of War ..				M	1	—	—	1	—	—	—	—
					F	3	—	—	1	—	2	—	—

TABLE 4. Compiled from figures supplied by Registrar General
Causes of death registered during Calendar Year 1957

<i>Death Rate per 1,000 Population</i>	<i>Disease</i>	<i>No. Deaths 1957</i>	<i>Per cent. of all Deaths</i>
·071	1. T.B. Respiratory	31	·60
·011	2. T.B. Other	5	·10
·018	3. Syphilitic disease	8	·15
—	4. Diphtheria	—	—
·002	5. Whooping Cough	1	·02
·002	6. Meningococcal infection	1	·02
·005	7. Acute poliomyelitis	2	·04
—	8. Measles	—	—
·018	9. Other infective and parasitic disease	8	·15
·346	10. Malignant neoplasm of stomach	152	2·93
·437	11. „ „ „ lung, bronchus	192	3·70
·196	12. „ „ „ breast	86	1·66
·091	13. „ „ „ uterus	40	·77
·962	14. „ „ other and lymph. neoplasms	423	8·16
·052	15. Leukaemia, aleukaemia	23	·44
·061	16. Diabetes	27	·52
1·704	17. Vascular lesions of nervous system	749	14·45
1·913	18. Coronary disease, angina	841	16·22
·380	19. Hypertension with heart disease	167	3·22
1·729	20. Other heart disease	760	14·66
·746	21. „ „ circulatory disease	328	6·33
·171	22. Influenza	75	1·45
·682	23. Pneumonia (including pneumonia of new-born)	300	5·79
·537	24. Bronchitis	236	4·55
·159	25. Other diseases of respiratory system	70	1·35
·098	26. Ulcer of stomach and duodenum	43	·83
·046	27. Gastritis, enteritis and diarrhoea	20	·39
·061	28. Nephritis and nephrosis	27	·52
·073	29. Hyperplasia of prostate	32	·62
·002	30. Pregnancy, childbirth, abortion	1	·02
·107	31. Congenital malformations	47	·91
·730	32. Other defined and ill-defined diseases	321	6·19
·077	33. Motor vehicle accidents	34	·66
·193	34. All other accidents	85	1·64
·102	35. Suicide	45	·87
·009	36. Homicide and operations of war	4	·08
11·791	All Causes	5,184	

TABLE 5. Deaths (corrected for transfers) occurring within the years 1956 and 1957 (Local figures)

<i>Inter- national Code No.</i>		<i>1956</i>		<i>1957</i>	
		<i>Total</i>	<i>Including</i>	<i>Total</i>	<i>Including</i>
001-008	T.B. of respiratory system	39		30	
010-019	T.B. other	5		6	
020-029	Syphilis and its sequelae	9		7	
030-039	Gonococcal infection and other V.D.	—		—	
040-049	Infectious disease in intestinal tract	—		—	
050-064	Other bacterial diseases	4		3	
070-074	Spirochaetal diseases (except syphilis)	1		—	
080-096	Diseases attributed to viruses	6		9	
100-108	Typhus and other rickettsial diseases	—		—	
110-117	Malaria	—		—	
120-138	Other infective and parasitic diseases	—		1	
140-148	Malignant neoplasm of buccal cavity and pharynx	16		16	
150-159	Malignant neoplasm digestive organs and peritoneum	352		357	
151	Malignant neoplasm stomach		143		151
153	Malignant neoplasm large intestine (except rectum)		82		84
154	Malignant neoplasm rectum		53		38
160-165	Malignant neoplasm respiratory system	192		202	
170-181	Malignant neoplasm breast & genito-urinary system	258		228	
170	Malignant neoplasm breast		96		85
171/4	Malignant neoplasm uterus		34		39
175	Malignant neoplasm ovary, fallopian tube and broad ligament		36		28
177	Malignant neoplasm prostate		37		28
180/1	Malignant neoplasm kidney, bladder and other urinary organs		45		45
190-199	Malignant neoplasm other and unspecified sites ..	71		53	
200-205	Neoplasms of lymphatic & haematopoietic tissues	37		58	
210-229	Benign neoplasm	8		11	
230-239	Neoplasm of unspecified nature	9		17	
240-245	Allergic disorders	24		21	
250-254	Diseases of thyroid gland	3		3	
260	Diabetes mellitus	32		27	
270-277	Diseases of other endocrine glands	2		4	
280-289	Avitaminoses, and other metabolic diseases	5		5	
290-299	Diseases of blood-forming organs	14		17	
300-309	Psychoses	—		2	
310-318	Psychoneurotic disorders	—		—	
320-326	Disorders of character, behaviour and intelligence	2		2	
330-334	Vascular lesions affecting central nervous system ..	696		712	
331	Cerebral haemorrhage		264		257
332	Cerebral embolism and thrombosis		379		405
340-345	Inflammatory diseases of central nervous system ..	8		17	
350-357	Other diseases of central nervous system	66		67	
360-369	Diseases of nerves and peripheral ganglia	—		—	
370-379	Inflammatory diseases of eye	—		—	
380-389	Other diseases and conditions of eye	—		—	
390-398	Diseases of ear and mastoid process	—		3	
400-402	Rheumatic fever	3		—	
410-416	Chronic rheumatic heart disease	101		85	
420-422	Arteriosclerotic and degenerative heart disease ..	1483		1452	
420	Arteriosclerotic heart disease, including coronary disease		743		846
422	Other myocardial degeneration		712		583
430-434	Other diseases of the heart	74		74	
440-447	Hypertensive disease	243		236	
440/3	Hypertensive heart disease		206		191
450-456	Disease of arteries	293		231	
460-468	Diseases of veins and other diseases of circulatory system	28		37	

TABLE 5—continued

Inter- national Code No.		1956		1957	
		Total	Including	Total	Including
470-475	Acute upper respiratory infections	2		—	
480-483	Influenza	57		69	
490-493	Pneumonia (4 weeks plus)	287		268	
500-502	Bronchitis	279		242	
510-527	Other diseases of respiratory system	75		68	
530-539	Diseases of buccal cavity and oesophagus ..	3		1	
540-545	Diseases of stomach and duodenum	58		44	
550-553	Appendicitis	5		7	
560-561	Hernia of abdominal cavity	21		11	
570-578	Other diseases of intestines and peritoneum ..	42		35	
580-587	Diseases of liver, gallbladder and pancreas ..	40		32	
590-594	Nephritis and nephrosis	48		25	
600-609	Other diseases of urinary system	35		25	
610-617	Diseases of male genital organs	28		30	
620-626	Diseases of breast, ovary, fallopian tube and para- metrium	—		—	
630-637	Diseases of uterus and other female genital organs	1		—	
640-649	Complications of pregnancy	1		1	
650-652	Abortion	—		1	
660	Delivery without complication	—		—	
670-678	Delivery with specified complication	—		—	
680-689	Complications of the puerperium	1		—	
690-689	Infections of skin and subcutaneous tissue ..	2		—	
700-716	Other diseases of skin and subcutaneous tissue ..	2		2	
720-727	Arthritis and rheumatism, except rheumatic fever ..	11		17	
730-738	Osteomyelitis and other diseases of bone and joint	4		3	
740-749	Other diseases of musculoskeletal system ..	3		2	
750-759	Congenital malformations	50		47	
760-769	Birth injuries, asphyxia and infections of newborn	60		51	
762	Postnatal asphyxia and atelectasis		37		31
763	Pneumonia of the newborn		—		2
770-776	Other diseases peculiar to early infancy	11		20	
780-789	Symptoms referable to systems or organs ..	5		3	
790-795	Senility and ill-defined diseases	14		19	
E800-802	Railway accidents	1		3	
E810-825	Motor vehicle traffic accidents	43		35	
E830-835	Motor vehicle non-traffic accidents	—		1	
E840-845	Other road vehicle accidents	1		1	
E850-858	Water transport accidents	1		3	
E860-866	Aircraft accidents	—		1	
E870-888	Accidental poisoning by solid and liquid substances	2		1	
E890-895	Accidental poisoning by gases and vapours ..	20		8	
E900-904	Accidental Falls	32		44	
E910-936	Other accidents	15		17	
E940-946	Complications due to nontherapeutic medical and surgical procedures	—		—	
E950-959	Therapeutic misadventure and late complications of therapeutic procedures	1		—	
E960-965	Late effects of injury and poisoning	—		—	
E970-979	Suicide and self-inflicted injury	46		46	
E980-985	Homicide and injury purposely inflicted by other persons	2		5	
E990-999	Injury resulting from operations of war	1		—	
TOTALS ..		5394		5181	

TABLE 6. Notifiable cases during 1957 (including Port Cases) Local figures

Notifiable Diseases	Notifications										Removed to hospital	Notified in each quarter				Attack rate per 1,000 population ages	Deaths (corrected for transfers) not necessarily relevant to notifications of 1957																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	At ages—years:											No.	%	1st				4th	All ages	At ages—years:																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Under 1	1 to 4	5 to 14	15 to 24	25 to 44	45 to 64	65 and upwards	2nd	3rd	Under 1				1 to 4	5 to 14		15 to 44			45 to 64	65 and upwards																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Diphtheria

* 17 cases occurred at home of which 2 were subsequently removed to hospital. No deaths were directly attributed to puerperal pyrexia.

TABLE 7. Tuberculosis Notifications in Bristol

CASES																		
			Sex	At All Ages	Un- der one	1-	5-	10-	15-	20-	25-	35-	45-	55-	65 and over			
1957—																		
Pulmonary Tuberculosis																		
New notifications				..	..	M	187	1	—	4	2	18	16	40	27	34	28	17
						F	114	2	1	2	3	15	24	37	15	10	4	1
Transfers from other areas				..	..	M	58	—	—	1	1	2	8	20	8	12	2	4
						F	32	—	—	—	1	5	9	7	3	3	3	1
Deaths mentioning Tuberculosis, not notified				..	..	..	M	5	—	—	—	—	—	—	—	—	2	3
						F	1	—	—	—	1	—	—	1	—	—	—	—
1957—																		
Non-Pulmonary Tuberculosis																		
New notifications				..	..	M	13	—	—	1	3	1	1	5	—	—	2	—
						F	23	—	2	3	1	3	1	5	3	2	1	2
Transfers from other areas				..	..	M	1	—	—	—	—	—	1	—	—	—	—	—
						F	4	—	—	1	—	—	—	3	1	—	—	—
Deaths mentioning Tuberculosis, not notified				..	..	..	M	—	—	—	—	—	—	—	—	—	—	—
						F	1	—	—	—	—	—	—	—	—	—	—	1
New Notifications—																		
Pulmonary—																		
				1956	..	M	191	—	4	10	3	15	21	29	21	39	32	17
						F	113	—	4	4	5	16	20	25	19	12	5	8
				1955	..	M	201	2	3	9	6	14	15	36	35	27	36	18
						F	147	—	3	3	3	26	24	47	21	8	5	7
				1954	..	M	218	2	4	11	4	24	21	42	25	46	24	15
						F	168	—	2	9	11	34	27	45	24	8	2	6
				1953	..	M	239	—	10	14	4	21	26	43	29	46	30	16
						F	185	—	7	6	11	20	38	42	29	17	7	8
				1952	..	M	266	—	8	11	6	23	35	49	39	39	37	19
						F	214	—	6	5	16	41	36	61	29	8	7	5
				1951	..	M	296	1	11	10	9	28	43	50	45	58	29	12
						F	208	—	9	10	9	31	51	47	18	15	10	8
				1950	..	M	223	2	11	10	7	27	16	44	36	34	30	6
						F	205	—	9	12	9	40	48	43	19	12	11	2
				1949	..	M	279	1	6	11	2	34	36	60	47	48	22	12
						F	199	—	3	5	11	36	42	52	21	8	14	7
Non-Pulmonary—																		
				1956	..	M	28	—	2	2	4	1	4	4	3	2	5	1
						F	20	—	—	1	2	1	—	6	3	3	2	2
				1955	..	M	19	—	—	2	—	1	3	5	3	2	2	1
						F	27	—	3	4	—	7	5	3	2	1	1	1
				1954	..	M	19	—	2	4	1	2	2	4	—	1	—	3
						F	30	—	2	—	2	5	6	11	—	—	1	3
				1953	..	M	16	1	5	—	—	3	2	2	1	1	—	1
						F	22	—	2	1	—	6	5	3	4	—	—	1
				1952	..	M	24	—	2	5	3	3	2	2	3	2	2	—
						F	30	—	6	3	—	1	3	6	7	3	—	1
				1951	..	M	26	1	4	2	1	3	2	3	3	2	4	1
						F	25	2	1	3	4	3	4	6	—	—	—	2
				1950	..	M	29	2	3	7	3	2	2	4	4	2	—	—
						F	22	—	6	1	2	2	2	3	5	—	1	—
				1949	..	M	37	2	6	5	6	4	2	2	3	2	4	1
						F	34	1	2	6	2	6	3	6	5	3	—	—

TABLE 8. Tuberculosis in Bristol—Deaths*(Registrar General's corrected figures)***PULMONARY TUBERCULOSIS—**

<i>Year</i>	<i>Sex</i>	<i>At All Ages</i>	<i>Under One</i>	<i>1—</i>	<i>5—</i>	<i>15—</i>	<i>45—</i>	<i>65 and over</i>
1957	M	23	—	—	—	3	9	11
	F	8	—	—	—	4	3	1
1956	M	23	—	—	—	4	13	6
	F	14	—	—	—	8	2	4
1955	M	38	—	—	—	11	19	8
	F	14	—	—	—	8	2	4
1954	M	41	—	—	—	12	23	6
	F	26	—	—	—	13	9	4
1953	M	61	—	—	—	24	28	9
	F	32	—	—	—	16	9	7
1952	M	62	1	—	—	20	31	10
	F	29	—	—	—	13	10	6
1951	M	83	—	—	1	27	43	12
	F	67	—	—	1	39	20	7
1950	M	89	—	1	—	28	47	13
	F	93	—	2	—	55	28	8
1949	M	108	—	1	—	43	52	12
	F	86	1	2	1	59	17	6

NON-PULMONARY TUBERCULOSIS—

1957	M	2	—	—	1	—	1	—
	F	3	—	—	—	—	1	2
1956	M	5	—	1	1	1	1	1
	F	1	—	—	—	—	—	1
1955	M	3	—	—	—	1	2	—
	F	4	—	—	1	1	—	2
1954	M	3	—	1	1	—	1	—
	F	4	—	1	—	3	—	—
1953	M	6	—	3	—	2	—	1
	F	6	—	1	1	1	2	1
1952	M	5	—	—	1	2	1	1
	F	6	—	1	—	2	1	2
1951	M	10	1	2	1	3	3	—
	F	4	—	1	—	2	1	—
1950	M	14	1	2	1	2	7	1
	F	5	—	1	1	1	1	1
1949	M	15	—	2	4	3	5	1
	F	8	—	1	3	2	1	1

TABLE 9. Infant Mortality (*Corrected for transfers*)**Deaths 1957** (*Local figures*)(*Registered in the period—Sunday 30-12-56 to Saturday 28-12-57*)

1956	Cause of Death	Total 1957	First day	From one day under one week	From one week to four weeks	Total under four weeks	Total from one month to under twelve months
—	T.B. respiratory	—	—	—	—	—	—
1	Meningococcal meningitis ..	1	—	—	—	—	1
1	Non-meningococcal meningitis ..	—	—	—	—	—	—
—	Acute poliomyelitis	—	—	—	—	—	—
—	Whooping cough	1	—	—	—	—	1
—	Measles	—	—	—	—	—	—
13	Pneumonia (four weeks plus) ..	12	—	—	—	—	12
7	*Pneumonia of the newborn ..	2	—	1	1	2	—
—	Influenza	—	—	—	—	—	—
1	Bronchitis	—	—	—	—	—	—
1	Gastro-enteritis (four weeks plus)	3	—	—	—	—	3
32	*Congenital malformations ..	27	4	11	6	21	6
13	*Birth injury	16	7	8	1	16	—
37	*Atelectasis	31	24	7	—	31	—
—	*Haemolytic disease of newborn ..	1	—	—	1	1	—
1	*Haemorrhagic disease of newborn	—	—	—	—	—	—
—	*Other diseases of early infancy ..	3	—	3	—	3	—
10	*Immaturity (unqualified)	18	11	7	—	18	—
12	*Other causes	10	1	—	1	2	8
129	TOTALS	125	47	37	10	94	31
	Rate per 1,000 live births registered in 1957	17.90	6.73	5.30	1.43	13.46	4.44
Year 1956	{ TOTALS	129	36	45	16	97	32
	{ Rate per 1,000 live births registered ..	19.34	5.40	6.75	2.40	14.54	4.80

* Where there has been mention of immaturity—{ 1957—Bristol cases—56
During 1956—Bristol cases—52

Infant Deaths in:—	Hospitals	111	(including 4 in hospitals outside City area)
	Nursing Homes ..	1	
	Private Residences ..	13	
	Total	125	

PREVALENCE AND CONTROL OF INFECTIOUS DISEASES

Dr. H. Temple Phillips
(*Chief Assistant Medical Officer of Health*)

N.B.—The figures given relate to the calendar year 1st January to 31st December, and may therefore differ slightly from those given elsewhere in this report, which relate to a 52-week period.

Diphtheria

No confirmed cases occurred during 1957. This was the eighth consecutive year with no confirmed cases in the City, and the eleventh consecutive year when no deaths were attributed to the disease. Information concerning immunisation against diphtheria is to be found in Section B of this report.

Dysentery

Ninety-three cases were notified during 1957. This was the lowest incidence since 1949, when 47 cases were reported. Again, for the ninth year in succession, no deaths were attributed to dysentery.

The cases were of the following types:—

Sonné	..	..	..	..	..	61
Flexner	..	..	..	..	..	4
Amoebic	..	..	..	..	..	1
Causative agent not identified	..	..	..	..	..	27
						<hr/> 93 <hr/>

The number of cases notified each month were:—

January	..	..	7	July	..	..	5
February	..	..	4	August	..	..	6
March	..	..	2	September	..	..	2
April	..	..	17	October	..	..	3
May	..	..	18	November	..	..	6
June	..	..	9	December	..	..	14

The following table shows the age and sex distribution of cases:—

Age			Male	Female	Total
Under 1 year	..	..	2	3	5
1—1 & 11/12ths	..	..	6	4	10
2—4	..	..	11	3	14
5—9	..	..	11	7	18
10—14	..	..	5	3	8
15—19	..	..	2	2	4
20—29	..	..	3	5	8
30—39	..	..	6	7	13
40—49	..	..	4	0	4
50—59	..	..	2	3	5
60—69	..	..	2	0	2
70+	..	..	0	2	2
All ages	..	..	54	39	93

Again the highest incidence (over 50% of cases) was in children under 10 years of age.

Geographically, the highest incidence was in Southmead (13 cases), Knowle and Knowle West (12 cases), and Lockleaze (10 cases). The higher incidence on housing estates is probably associated with the habits of the children, who tend to congregate and play together to a greater extent than in other areas.

The four cases of Flexner dysentery occurred in March, April, October and December respectively, and appeared to be unconnected. No source of infection was found.

Enteric Fever

One case of typhoid fever occurred, in April, in a man aged 45. It was proved beyond any reasonable doubt that he had been infected by his landlady whilst staying in Pembrokeshire. The landlady was a known carrier of the same phage type (D1) of typhoid bacillus.

Erysipelas

Sixty-four cases were notified during 1957, as compared with 73 in 1956 and 64 in 1955 (the latter was the lowest ever recorded in Bristol).

Food Poisoning

The total number of cases notified during 1957 was 143—the lowest since 1952. No deaths were attributed to the disease during the year, though one patient died in Ham Green Hospital from coronary thrombosis whilst under treatment for food poisoning.

The cases were of the following types:—

Salmonella infections	..	..	..	87
<i>S. typhimurium</i>	..	..	..	79
<i>S. newport</i>	..	..	..	3
<i>S. anatum</i>	..	..	..	1
<i>S. bovis morbificans</i>	..	..	..	1
<i>S. heidelberg</i>	..	..	..	1
<i>S. thompson</i>	..	..	..	1
<i>S. worthington</i>	..	..	..	1
Staphylococcal (toxin) food poisoning	..	..	..	13
No causative agent identified	..	..	..	43

The monthly notifications were as follows:—

January	..	..	6	July	..	..	13
February	..	..	3	August	..	..	19
March	..	..	17	September	..	..	24
April	..	..	19	October	..	..	9
May	..	..	10	November	..	..	7
June	..	..	14	December	..	..	2

The following table shows the numbers of persons affected in each outbreak:—

Single cases	..	..	..	..	..	67
No. of outbreaks involving 2 cases	..	..	..	..	..	17
” ” ” ” 3 ”	..	..	..	..	..	8
” ” ” ” 4 ”	..	..	..	..	..	2
” ” ” ” 5 ”	..	..	..	..	..	2

The age and sex distribution of cases was as follows:—

			Male	Female	Total
Under 1 year	..	..	7	4	11
1—1 & 11/12ths	..	..	7	4	11
2—4	..	..	15	7	22
5—9	..	..	15	5	20
10—14	..	..	3	7	10
15—19	..	..	3	5	8
20—29	..	..	10	9	19
30—39	..	..	7	5	12
40—49	..	..	3	3	6
50—59	..	..	4	5	9
60—69	..	..	5	6	11
70+	..	..	1	3	4
Total	..	..	80	63	143

In no case was a particular food definitely proved to have been the source of infection. Despite prompt action, it is seldom that samples of suspected foods are still available when cases are visited.

Six cases (involving four families) of staphylococcal toxin food poisoning which occurred in June 1957 were thought to have been due to ham. The rusk in which the ham was rolled had probably been infected by a food handler employed by the wholesaler.

In one case of salmonella typhimurium infection, there was a history that the child had played with a dead mouse three days previously! This may well have been the source of infection.

In recent years large outbreaks of salmonella typhimurium infections have been infrequent and one could wish for more information as to the source of infection in the smaller incidents with which we are now confronted. Nowadays foodstuffs are often centrally processed and then distributed on a very wide basis throughout the country. One cannot help suspecting that this practice will always increase the possibility of widespread infections unless every precaution is taken to produce and handle foods in the most hygienic way. It is worth noting that the importation of processed egg (which is often shown to contain pathogenic salmonellae) may be one of these untraced sources of infection even though precautions are taken to use such eggs only after the most thorough safeguards. Reference to this problem is made in the section of the report dealing with sea and air port health.

Measles

A total of 7,119 cases were notified—these being almost equally divided between the two sexes. This high incidence, following a low incidence (349 cases) in 1956, was in accordance with the usual pattern of measles notifications, which shows a marked tendency to assume epidemic proportions every two years.

For the second year running no deaths were attributed to measles.

Ophthalmia Neonatorum

Fifteen cases were notified during 1957 as compared with 28 in 1956. No gonococcal infections were reported.

Pneumonia

The total notifications (734) were the highest for any year since the disease was made notifiable in 1919. Acute primary pneumonia accounted for 590 cases and acute influenzal pneumonia for 144 cases. Forty-eight per cent. of the notifications were received during the last quarter of the year, and the high incidence may be accounted for—at least in part—by the epidemic of “Asian” influenza.

Poliomyelitis

Ninety-eight cases were notified in 1957. This followed a very low incidence (10 cases) in 1956—the lowest since 1946. Seventy cases (32 male and 38 female) were paralytic, and 28 (19 male and 9 female) non-paralytic. There were two deaths, both paralytic cases. One was a girl aged 5 years; the other a nursing mother who died three days after delivery.

The age and sex incidence was as follows:—

				<i>Male</i>	<i>Female</i>	<i>Total</i>
Under 5	..	..	..	22	14	36
5—14	..	..	..	13	16	29
15—24	..	..	..	6	4	10
25+	..	..	..	9	14	23
Total	..	..	..	50	48	98

The geographical incidence of cases was as follows:—

Hartcliffe, Highridge and Withywood	13
Lawrence Weston, Henbury and Brentry	12
Bishopston, Horfield and Ashley Down	12
Knowle and Knowle West	10
Henleaze and Westbury	8
Shirehampton and Avonmouth	8
St. Paul's, Easton, Eastville and St. George	7
Brislington and St. Anne's	7
Stoke Bishop, Sea Mills and Coombe Dingle	5
Clifton and Cotham	5
Fishponds and Kingswood	4
St. Philip's, Barton Hill and Redfield	3
Bedminster	2
Southmead	1
No fixed abode	1

It is interesting to note that only one case occurred in Southmead, although this was the area of highest incidence (68 cases) in 1955. Possibly the population was protected by natural immunity acquired during the 1955 epidemic.

Details of vaccination against poliomyelitis are to be found in Section B of this report.

Puerperal Pyrexia

The following is an analysis of the 230 notifications received during 1957:—

	<i>Hospital cases</i>	<i>District cases</i>	<i>Total</i>
Genital Tract Infections	70	2	72
Urinary Tract Infections	64	3	67
Breast Infections	25	2	27
Respiratory Tract Infections (including tonsillitis and influenza)	22	5	27
Post-Operative Reactions (including blood transfusion)	6	1	7
Poliomyelitis	1	—	1
Anaemia	1	—	1
Unknown	27	1	28
Total	216	14	230

Rheumatism (Acute)

Acute rheumatism occurring in persons under 16 years of age has been locally notifiable in Bristol since October, 1947. Details of cases are shown in the accompanying table.

Scarlet Fever

Notifications totalled 316 (138 male and 178 female). This was even less than the previous year's figure (324 cases), which was the lowest since 1918. For the sixth year in succession no deaths were attributed to the disease.

Tuberculosis

See separate report in Section B.

Whooping Cough

The number of cases notified was 1,014 (513 male and 501 female). One death was recorded—a girl aged three months. Information about immunisation against whooping cough appears in Section B of this report.

Tabulation by Age, Sex and Clinical Classification of Cases notified as Acute Rheumatism during the year 1957

Total — 34

Clinical Classification of Case Notified	AGE IN YEARS										Total Both Sexes (including * recurrences)
	0—4		5—9		10—14		15 & over		All Ages		
	M	F	M	F	M	F	M	F	M	F	
1. Rheumatic Pains and/or Arthritis without heart disease	—	—	1 1*	2	3 2*	2	1	—	8	4	12
2. Rheumatic Heart Diseases (Active)											
(a) alone	—	—	—	—	—	—	—	—	—	—	—
(b) with polyarthritis	—	—	1	—	2	1 3*	—	—	3	4	7
(c) with chorea	—	—	—	1	—	—	—	—	—	1	1
3. Rheumatic Heart Diseases (Quiescent)	—	—	—	—	—	—	—	—	—	—	—
4. Rheumatic Chorea (alone)	—	—	—	2	1	2	—	—	1	4	5
TOTAL Rheumatic Cases	—	—	3	5	8	8	1	—	12	13	25
5. Congenital Heart Disease	—	—	—	—	—	—	—	—	—	—	—
6. Other non-rheumatic heart disease or disorder	—	—	—	—	—	—	—	—	—	—	—
7. Not rheumatic or cardiac disease	—	—	2	5	—	2	—	—	2	7	9
TOTAL Non-Rheumatic Cases	—	—	2	5	—	2	—	—	2	7	9

EMPLOYMENT IN THE BRISTOL AREA

The figures are estimates based partly on the number of national insurance cards exchanged in the quarter beginning June, and partly on returns rendered by employers of five or more workpeople, showing the numbers of insurance cards held by them. Where information is available that cards were exchanged at one Local Office for persons working in the area of another Local Office, the figures for the former Office have been reduced and those for the latter correspondingly increased in order to make the figures in all cases relate as closely as possible to the numbers working in each area.

NOTE: This statement has been prepared solely for the purpose of providing an approximate indication of the industrial structure of the area. The figures are not sufficiently precise to enable comparisons to be made in detail between consecutive years, and no significance should be attached to relatively small changes.

We are indebted to Mr. S. J. Murray, Manager of the Bristol Employment Exchange of the Ministry of Labour and National Service, for the following tables.

TABLE I

Estimated numbers of Insured Employees in the area of the Bristol, Horfield, Avonmouth, Eastville, Kingswood and Westbury-on-Trym Employment Exchanges at June 1957

<i>Industrial Group</i>	<i>Males aged 15 and over</i>	<i>Females aged 15 and over</i>	<i>Total</i>
Vehicle Manufacture (including Aircraft) ..	28,554	4,173	32,727
Distribution	15,708	13,283	28,991
Professional Services	8,434	13,849	22,283
Transport and Communication	20,567	2,294	22,861
Food, Drink and Tobacco	11,047	9,478	20,525
Building and Civil Engineering	16,267	541	16,808
Paper and Printing	10,210	5,974	16,184
Engineering and Shipbuilding	11,957	2,149	14,106
Miscellaneous Services	3,548	11,880	15,428
*National and Local Government	6,220	1,829	8,049
Clothing	2,191	3,829	6,020
Insurance, Banking, etc.	2,929	2,122	5,051
Gas, Electricity and Water	4,546	640	5,186
Chemicals	2,646	1,096	3,742
Metal Manufacture	3,273	400	3,673
Wood and Cork (including furniture)	2,293	651	2,944
Metal Goods Manufacture	1,796	771	2,567
Other Manufacturing Industries	1,747	518	2,265
Non-Metaliferrous Mining Products	1,217	346	1,563
Textiles	656	765	1,421
Agriculture and Fisheries	1,168	298	1,466
Leather, etc.	366	176	542
Mining, etc.	676	32	708
Precision Instruments, etc.	266	92	358
Ex-Servicemen (not allocated)	34	—	34
Grand Total* ..	158,316	77,186	235,502

* Most civil servants have their contributions paid without the use of cards and are therefore, excluded from the figures. Also excluded are seafarers employed on foreign-going ships, whose contributions are paid in bulk.

TABLE 2

*Totals of Estimated Number of Employees
Greater Bristol Area (including Kingswood)*

<i>Year</i>		<i>Males</i>	<i>Females</i>	<i>Total</i>
1957	..	158,316	77,186	235,502
1956	..	150,770	73,487	224,257
1955	..	146,767	72,905	219,672
1954	..	147,742	71,890	219,632
1953	..	145,931	68,972	214,903
1952	..	145,562	70,415	215,977
1951	..	155,764	72,129	227,893

THE WEATHER IN 1957

The comment and statistics have been provided by Mr. G. E. Clothier of the Department of Agriculture and Horticulture, University of Bristol, Research Station, Long Ashton.

The first three months of the year were wet and unusually mild—cold spells from January 10th to 19th and February 14th to 20th were of no great intensity. On the coldest night, February 17th, only 5° of air frost were recorded. Snow was rarely reported, and only on the morning of February 20th was the ground lightly covered. Wet and stormy weather occurred in late January and early February, with strong winds from the south and south-west on January 31st and February 4th. March was particularly mild, with some boisterous weather between the 13th and 21st.

April was exceptionally dry, with north-easterly winds for much of the time. May was cool and sunny at first, but rain from the 8th to 17th made a welcome break to a dry spell which had lasted from March 26th. Fine weather soon returned with higher temperatures and drying winds from the north-east, and as June was generally warm and sunny, with the year's warmest day on the 17th, when maximum temperature was 86°, drought conditions were much in evidence by the end of the month.

July, warm for the first few days, thereafter became dull, cool and wet, a type of weather which was much in evidence during August, though there were a few warm, sunny days early in the month. Westerly gales were experienced on the 24th and 25th. In September, cool and cloudy weather was general, with a wet and stormy south-westerly spell from the 6th to 10th, and, to a lesser extent, 21st and 25th.

The first half of October was dry, with light variable winds but then conditions became unsettled. November opened with heavy rains and south-westerly gales on the 5th and 6th, but conditions soon became anticyclonic with light northerly winds, giving rise to considerable fog at times. December at first was very changeable—frost and much fog during the first few days quickly dispersed on the 6th with the onset of wet and stormy conditions and a week of strong winds from points between west and south, giving way to strong north-easterly winds from 13th to 16th. For the remainder, the month was generally mild with light winds.

No severe thunderstorms were recorded at Long Ashton during the year, though thunder was heard on eleven days.

Weather Notes, 1957, Long Ashton

		Air Temperature (F°)				Rainfall (")		Sunshine (Hours)		Relative Humidity (%)		Mean Pressure (Millibars)					
		Means of A & B		Difference from Normal		Number of Ground Frosts		Most in a Day		At 09.00 hrs.		At Sea-Level					
		Maximum	Minimum			Total	% of Average	Day with .01" or more	Daily Mean	% of Average			Difference from Normal				
January	..	48.0	37.7	42.9	+2.5	57	28	16	3.20	95	17	0.85	1.27	81	89	1021.4	+6.5
February	..	48.7	37.3	43.0	+2.3	54	27	17	3.46	134	22	1.05	2.81	116	92	1005.4	—10.4
March	..	56.2	42.9	49.6	+5.6	64	29	9	2.86	123	13	0.58	2.91	75	89	1011.8	—4.1
April	..	57.0	40.9	48.9	+1.3	66	32	11	0.15	6	3	0.08	5.25	96	71	1023.1	+9.2
May	..	60.5	43.0	51.8	—1.3	72	33	6	1.94	75	10	0.42	7.13	114	71	1017.7	+2.6
June	..	71.7	50.6	61.1	+2.6	86	38	3	1.79	85	10	0.72	9.74	139	64	1018.0	+1.2
July	..	69.0	55.6	62.3	+0.8	82	45	0	4.47	141	19	0.85	4.80	81	80	1013.8	—1.2
August	..	68.1	53.3	60.7	—0.4	79	43	0	3.15	87	15	0.80	5.27	89	78	1013.5	—1.6
September	..	62.0	50.1	56.1	—1.0	68	36	1	4.57	110	19	1.02	3.63	77	83	1014.7	—1.6
October	..	59.5	45.9	52.7	+1.6	68	34	6	3.72	96	14	0.77	2.70	82	90	1018.0	+3.2
November	..	48.3	38.0	43.1	—1.7	55	27	12	2.76	74	8	1.12	2.04	108	90	1019.6	+6.5
December	..	46.7	34.7	40.7	—0.7	56	23	19	2.56	72	18	0.64	1.67	113	92	1015.1	+0.1
Totals or Means		58.0	44.2	51.1	+1.0	34.62	95	168	4.10	98							

MATERNAL AND CHILD WELFARE NURSING AND ALLIED SERVICES

Dr. Sarah Walker

(Senior Medical Officer—Maternal and Child Health)

Maternity Services

The co-ordinated scheme for ante-natal and post-natal care of mothers in Local Health Authority clinics described in previous annual reports has continued to work well. Sixty-five general practitioners now work in Local Health Authority clinics.

Pressure on maternity bed accommodation in Southmead Hospital has increased in the past year, partly as a result of the increasing number of patients accepted from outside the City (a figure which has risen from 16 per cent. in 1952 to 22 per cent in 1957) and partly owing to the allocation of more beds for mothers requiring ante-natal rest and treatment, the latter policy being a most important preventive measure in the interest of both mothers and babies. On the initiative of the Health Committee, a Joint Committee of representatives of the Health Committee, the Regional Hospital Board, the United Bristol Hospitals, Southmead Hospital Management Committee and the Local Medical Committee has been set up to consider the whole position.

During the year, consideration has been given to two important Ministry of Health Reports—one on Maternal Deaths and the other on Ante-natal Care related to toxæmia.

After consideration of the latter report by a medical committee of consultants, general practitioners and medical officers of health in the Bristol clinical area, a local report (including a clinical memorandum by Professor Gordon Lennon) has been drawn up and circulated to all concerned. The majority of recommendations contained in the Ministry's memorandum were already being implemented in the City, but representations have been made to the authorities concerned to fill those minor gaps which exist. The intensive drive against toxæmia carried out in Bristol in recent years has included the follow-up by the domiciliary midwives of defaulters and of mothers showing even slight rises in blood pressure, facilities for full blood tests, the inter-change of records including the use of a personal card, and a comprehensive scheme of education in parentcraft classes throughout the City. It is gratifying to be able to record that no Bristol mother has died from toxæmia during the past four years. This success has only been possible through the co-operation and combined efforts of the hospital, general practitioner and Health Authority's Services.

The Health Committee have given full consideration to the reports mentioned and have decided to reduce the charges for home helps provided for mothers requiring rest for toxæmia or other complications of pregnancy.

In October, Bristol, together with the neighbouring areas, undertook the pilot trial for the National Birthday Trust Peri-natal Survey scheduled to take place throughout England, Wales and Scotland in March 1958.

It is a matter of some interest to look back from time to time in order to form a satisfactory perspective of the services we are providing and to foresee possible future developments. To this end Mr. P. Mackintosh, Health Education Officer, has contributed the following account of the development of ante-natal care and parentcraft clubs in Bristol:

"The only way to grapple satisfactorily with the problem of infant mortality is to get every birth notified within 48 hours of its occurrence, under the Notification of Births Act, and to appoint women Health Visitors who could ascertain at once whether the infant was thriving and well cared for. If such work were undertaken by the Municipal Health Committee of Bristol, and if cases in which the baby did not thrive were handed to our Committee, we should get into touch with exactly the right material for our work."

These words make strange reading today, but when they were written in 1910, maternal and child welfare was in its infancy; the words are contained in a report from a Miss Townsend, who was the secretary of a Committee of Ladies, which in November 1909 had opened the Bristol School for Mothers, in Broad Plain, St. Philips; this Committee's report was included in the Annual Report of the Medical Officer of Health. At the School for Mothers, many demonstration lessons were given on the making and repairing of infants' and children's clothing, bathing and dressing infants, washing bottles, preparing food, etc. Special lessons were given on the care of children's eyesight and teeth and—"special classes were held for expectant mothers at which Dr. Cornall and a trained nurse give advice as to the care of the mother's health and preparation for the confinement." This School for Mothers seems to have been the origin of our present ante-natal clinics, and it would appear that it was started none too soon, for although the Medical Officer of Health announced in his Annual Report that the Infant Mortality Rate was the lowest ever recorded (90·3), he went on to say:—"In the Central districts however, even in these years, the infant mortality rates are higher than they should be (Central 105·6, St. Philip's 100·4) and the Public Health Authority might well join with private enterprise in distributing advice and help."

Miss Townsend did not have to wait very long to see her suggestions adopted. In 1911, the Health Committee appointed two Health Visitors and in the following year, the Notification of Births Act was adopted. The work developed rapidly and two years later seven Schools for Mothers had been established in the City. As many voluntary agencies were now involved in maternal and child care work, it was decided that amalgamation would lead to a better service. The year 1916 is noteworthy for two developments in this field: it was the first complete year for which the Health Committee was responsible for the administration of the Midwives Act of 1902; the Schools for Mothers affiliated and became the Bristol Infant Welfare Association and Council of Schools for Mothers. The Medical Officer of Health and the Medical Inspector of Midwives were members of the Council; the schools had to employ a properly qualified medical officer for infant consultations and all lectures were given by either doctors or qualified nurses and teachers.

By 1917 when the Local Government Board carried out its enquiry on the provision of maternity and child welfare services, Bristol had 14 Schools for Mothers, four of which operated as maternity centres. Consultations for children up to 5 years of age were held weekly at each centre under medical supervision; infants were weighed and examined and mothers advised. Systematic instruction in health and home management and lectures on infant care and mothercraft were given. Minor ailments were treated and certain infant welfare foods were sold at cost price. Expectant mothers not attending a maternity centre were kept under observation by the superintendent health visitor. Visiting was from the centres and expectant mothers received advice and assistance at the maternity centres. Special classes were held for them and "free dinners provided for necessitous cases."

By 1920, ante-natal work in Bristol was carried out almost entirely at five municipal clinics but some ante-natal supervision was also given at the Bristol Royal Infirmary and Bristol General Hospital. Medical attendance in the municipal clinics was in the hands of specially qualified lady medical officers who were assisted by health visitors. Some time went by before the services began to emerge more as we know them today. In 1928, the first full-time Senior Medical Officer for Maternity and Child Welfare services was appointed. Ante-natal examination and instruction was now carried out in 7 municipal clinics and was still undertaken by women medical officers and health visitors. In addition to these clinics the Bristol General Hospital, Bristol Royal Infirmary, Southmead and Brunswick Maternity Home arranged for women who were to be attended by their maternity staffs to attend the appropriate hospital ante-natal clinic.

The volume of ante-natal work continued to grow and it became evident that for the work to be carried out properly the accommodation afforded in the existing clinics was inadequate and unsuitable. The 'thirties saw the beginnings of the provision of more suitable accommodation to meet the needs of the expanding service. In 1931 a new municipal maternity and child welfare centre was opened, and six years later, the Central, Bedminster and Speedwell Clinics were opened. The year 1937 was marked by a very important development—the setting up of a service of municipal domiciliary midwives—the result of the 1936 Midwives Act.

The National Health Service Act produced surprisingly little change in the ante-natal services. Attendances at the clinics did not decrease and many general practitioners continued to refer their patients to the Local Health Authority Clinics. Even before 1948 Bristol had gone some way towards building up obstetric teams such as were visualised in the National Health Service Act. A number of obstetric consultants, each with his maternity beds in a municipal hospital, visited the main clinics in the City to see mothers ante- and post-natally. Alongside them were working the local authority doctors, the midwives and the health visitors. The opportunity to bring in the other members of the team—the general medical practitioners—came in 1952, with the opening of the William Budd Health Centre. The advantages to the expectant mother were obvious—she now had only one place to attend for her ante-natal care and there at the local authority centre she saw her own doctor, the midwife, the hospital consultant and the health visitor. Later, this service was extended to the Maternal and Child Welfare Clinics and arrangements whereby the general practitioner can carry out ante-natal examinations of their own patients in the local authority clinics and avail themselves of the services provided, are now operating in thirteen of the clinics, with over sixty doctors participating.

A good deal of the time of the ante-natal sessions is devoted to health education of the expectant mothers and in this respect parentcraft clubs, and classes are held at all the maternity clinics.

At her first visit to the ante-natal clinic, each expectant mother is invited to attend the seven sessions devoted to parentcraft. Five of the sessions are held in the afternoons and at these, the expectant mother meets and receives instruction from the midwife, the health visitor and the nutritionist; the remaining two sessions are held in the evening, when the expectant fathers are invited to attend with their wives. Each of the afternoon sessions is followed by a period devoted to ante-natal exercises and relaxation, conducted by a physiotherapist.

Through the medium of these clubs, new opportunities for health education have been created, and if we maintain that health education is the teaching of a way of life, then the ante-natal sessions and parentcraft clubs are very valuable starting points—for education for motherhood does not end with health education for the expectant mother; indeed, it only begins there and should go on throughout life!

Domiciliary Service of Midwives

Follow-up of patients discharged early (under 10 days) from hospital.

<i>Year</i>	<i>Bookings</i>	<i>Deliveries</i>	<i>Nursings</i>	<i>No.</i>	<i>Visits</i>	<i>Home Investigations</i>
1957 ..	2,350	1,698	1,699	595	6,058	1,803
1956 ..	2,075	1,516	1,607	394	3,519	1,483
Increase	275	182	92	201	2,539	320

Miss D. Gearing, Supervisor of Midwives, reports:

During the past year all the work of the Domiciliary Service has increased, as the figures above show. While the number of full-time staff has remained the same, the number of pupil midwives taking Part II training fell from 66 to 56. In recent years, pupils have shown less interest in taking up domiciliary midwifery as a profession than in the past and only two of the 1957 pupils have returned to district midwifery in this country. This failure to attract the younger midwives into domiciliary practice is causing considerable concern throughout the country.

From September, part-time midwives have been employed on a sessional basis; they have been most helpful for relief work and for the care of patients discharged early from hospital.

The midwives take an active share in the teaching of parentcraft and these classes have been much enjoyed by the mothers.

Eight midwives with their own cars now have Trilene apparatus. Trilene is proving very useful in the later stages of labour and when suturing is required.

During the year Miss Pugh, Deputy Supervisor of Midwives, has given several talks to school leavers. Seven midwives attended post-graduate courses as required by Central Midwives Board rules.

The premature baby midwives have also had a busier year than in 1956, their total number of cases being 146 against 101. Of these 37 were born at home and 109 discharged from hospital.

Sub-Fertility Clinic

This clinic provides for full investigation of sub-fertility by a team of doctors: Mr. E. M. Edwards (Consultant from Professor Lennon's staff), Dr. Norma Boxall and Dr. Irving Bell.

Dr. N. Boxall reports:

A further increase of new and old patients has been noted, 213 new and 1,047 old as compared with 186 and 767 in 1956. An increased proportion of pregnancies has also been reported, but many may be coincidental, some occurring as soon as investigations have begun. A large proportion of our cases with marital problems have secured help from Miss Hogg, the physiotherapist, by attending short courses of relaxation classes. The success of this venture justifies its continuation.

Only one case of pelvic tuberculosis has been discovered this year; we hope that this reduction reflects the earlier detection and efficient treatment of the disease as a whole.

Close co-operation is maintained with the Children's Department of the Local Authority, and couples who want to adopt but who have not sought medical opinion about their infertility have been referred to us. A few of these have become pregnant.

Child Welfare Services

Child welfare clinics continue to be held at the thirty-six centres in the City. Attendances at the centrally situated clinics have tended to decline as families with young children have been re-housed, but there has been a corresponding increase in attendances at clinics on the new estates. Mention has been made in previous reports of the development of the preventive mental health service as an integral part of the maternal and child welfare service.

This year, Dr. Lumsden Walker has been appointed as part-time consultant psychiatrist to direct the work of the psychiatric team, and to see cases requiring his advice on diagnosis and treatment. Some extension of the case conferences described in last year's report has taken place, but the full implementation of the scheme will not be possible until the appointment of additional psychiatric social workers. During the year, Mrs. Bodman, psychiatric social worker, has met groups of health visitors for discussion of basic psychiatric principles applied to various behaviour problems in young children and to parental attitudes. This has been very helpful to the health visitors concerned.

An experimental play group was opened at Hartcliffe Clinic in July by Miss M. Astley, psychiatric social worker, who reports as follows:

The first session of the group was held on the 9th July, 1957, and there have been regular meetings every Tuesday morning, with a three-week break during the summer holidays. The group is open from 9.15 a.m. until 12.30 p.m., the times of arrival and departure depending on individual needs. There has been an average attendance of six children. Sessions have been held in the main hall of Hartcliffe Clinic. Staff have commented on the lack of noise, and there has been comparatively little untidiness from the sand and water play.

The group is composed of 2½- to 5-year old children with emotional problems causing the parents considerable concern. The children come from stable homes where both mother and father play an active part in bringing up the children. It was intended that the mothers should be selected from similar social backgrounds, irrespective of the children's symptoms, in order to form a group for the purpose of joint discussions. Unfortunately because of the staffing problem it has not been possible to develop this aspect of the work and the mothers have been seen individually whenever necessary.

The experiment has been well worth while and most of the children have benefited from their attendance.

There is a need for nursery provision preferably for a few hours daily, in this area. Four children whose problems have been dealt with and could be discharged need continued contact with some activity outside the home until they are admitted to school.

Ascertainment and Training of Young Deaf Children

Mrs. Stevens, a teacher of the deaf, with special experience in the ascertainment and training of the young deaf child, has been appointed to undertake part-time sessional work in the department.

Mrs. Stevens will work in close association with the E.N.T. consultants; and Mr. King, psychologist from the Child Guidance Clinic, will be available for mental assessment of the children. This development of the work with particular emphasis on early diagnosis and training in infancy will provide a valuable extension to the service for deaf children.

Dental Care

W. H. B. Stride, Senior Dental Officer, reports as follows:

Mothers and Young Children

Dental examination was carried out for expectant and nursing mothers and young children at nine health clinics during the year. Mothers are referred by the doctors from the ante-natal and post-natal sessions, also by the health visitors and nursing staff. Some mothers apply personally for treatment. Emergency treatment is available at all times.

The number of mothers inspected was 675 as against 695 last year, and the number treated 645 (as against 669). The number of permanent fillings was 901 (as against 726) and 639 sessions were devoted to this side of the work.

Staff

At the end of last year the number of full-time staff was nine and two more were appointed in January. Mr. W. Chaplin commenced on January 1st and Mr. J. James on January 7th. Unfortunately Mr. James resigned at the end of June and has not yet been replaced.

Clinics

The appointment of Mr. James made it possible to carry out maternal and child welfare work during part of the year at the new Mary Hennessy Clinic opened at Hartcliffe, a rapidly expanding housing area on the periphery of the City.

Dental Technician

Mr. Wheeler is finding the new workroom at the Charlotte Keel Clinic in Claremont Street much more convenient from all points of view than the temporary one previously used. During the year a total of 146 full and 82 partial dentures were constructed and in addition 15 repairs or additions were carried out.

Oral Hygienist

The work of the Oral Hygienist has continued without interruption; instruction is given to individual mothers and talks are arranged at ante-natal sessions whenever opportunity offers. This work is more and more appreciated as it is so closely bound up with general health—the more importance we can give to it the better.

The number of scalings and polishings carried out for mothers was 280. Detailed statistics relating to dental treatment appear at the end of this section.

Day Nurseries

The seven day nurseries continue to meet short-term emergency and long term health and social needs of young children. The lack of nursery provision is very apparent on the Hartcliffe and Withywood estates where children under five form a very high proportion of the population. To help to meet this problem the Health Committee have decided during the coming year to provide transport

for children from these estates into Coronation Road Day Nursery. The practice of family grouping—one senior member of the staff being responsible for each group of about eight children of varying age range, is now well established in all the nurseries. The scheme works well; it provides for a more personal relationship with the child, and helps the nursery student in her study of the development of each child in the group to which she is attached. Close liaison continues with the Education Department through Miss Perry and Miss Jones, in the training of nursery students and in all matters relating to the educational needs of young children. Our matrons and wardens greatly value the link with nursery schools, which provide for exchange visits.

The following figures show the attendance position at the end of the year:—

<i>Total</i>	<i>No. of Registers</i>	<i>Waiting List</i>	<i>Average</i>
<i>Accommodation</i>	<i>on 31.12.57</i>	<i>on 31.12.57</i>	<i>Dec. 1957</i>
290	331	42	248

Clinic for Backward Children

Dr. Helen Gibb, Medical Officer, reports:

This clinic is held twice a month at Central Health Clinic. A variety of interesting cases is seen. The mental level and physical condition of the children seen varies widely.

Among the milder cases is the child of low average or sub-normal intelligence, who is slightly retarded in physical development. These children are sometimes emotionally disturbed by the parents' anxiety about backwardness. In response to the parents' demands, they frequently become withdrawn and unco-operative. Attendance at a day nursery or nursery school is often helpful and most become suitable eventually for normal school life.

A considerable number of those seen are Mongols. Most of these are satisfactorily placed at the Occupation Centre. A few require admission to institutions. Among the physical conditions simulating mental retardation are speech defects and partial and total deafness. When accompanied by subnormal intelligence and emotional disturbance they present a complicated picture.

Some children with a severe degree of mental defect accompanied by cerebral palsy and congenital defects are among those who attend regularly. They receive physiotherapy to prevent deformities and to assist towards as much physical independence as is possible.

The demands of the severely handicapped and mentally backward child on the physical and emotional health of the mother over a period of several years is very great. This often affects the whole family. For this reason it is important that as much help as possible should be given to these mothers, who appear to derive considerable support from a special clinic of this type.

The Health Visiting Service

Miss L. M. Bendall, Chief Nursing Officer, reports:

Following the publication of the Working Party Report on the training and recruitment of health visitors which was published in June 1956, I think the most outstanding development in the health visiting service lies in the recognition of the health visitor as a medico-social worker by the Whitley Council: for from July 1957 the health visitor was lifted out of the framework of Public Health Nursing Staff and given an additional monetary award. Previously her salary had been considered in relation to that of the Ward

Sister in Hospital, and there is no doubt that, apart from the financial consideration, it is a good thing to get away from the notion of the nursing background of the health visitor in relation to salary, and it is true, I think, to say that the status of the health visitor has been increased accordingly.

There is still a shortage of health visitors, not only in Bristol, but nationally, and it will be some time before the Whitley Council Award shows evidence of increased recruitment. The health visiting service personnel is not the static body it used to be. In common with industry and other fields of work, the staff come and go, and administrative difficulties are increased thereby. On the whole, however, resignations and appointments remain equal and a reasonably efficient service is maintained.

The district health visitor divides her time between home visitation and health teaching in clinics. She carries a case load of "under fives" and continues to practise selective visiting to families wherein lie the greatest need.

Her co-operation with general practitioners is becoming closer, partly due to the fact that general practitioners participate in ante-natal work in municipal clinics and partly to her own efforts in making herself known to them.

Because of staff shortage there is inevitably a slow development of the conception of the health visitor as a family worker.

Specialised Visiting

The general policy continues to be that the health visitor takes responsibility for everything within her own district, but notwithstanding, a limited amount of specialisation is practised.

There has been during the past year, a very real development in the field of "special families" which is the subject of a separate report.

Other specialisation is as follows:

Blindness Prevention

Mrs. J. Lillington, health visitor, spends half her time in the field of prevention of blindness and she reports as follows:

The term, Blindness Prevention, is apt to be rather misleading, but it is difficult to find a better one. There are many cases of blindness for which there is no treatment available. My work is mainly concerned with the variety of cases which are amenable to treatment. An important part of my work is home visitation of such cases, and escorting them to hospital for diagnosis and treatment.

It frequently happens that a mother with a large family is quite unable to take a child to the Eye Hospital regularly.

Alternatively, many elderly folk with no friends or relatives, whose sight is very poor, cannot risk the journey to hospital alone. They may be too frail or nervous, or deaf and unable to follow the advice and instructions given to them without patient repetition and encouragement from me.

There are many such problems, and it is by visiting such people and arranging for the surgeons' recommendations to be carried out, that the term "prevention" is really implemented.

Apart from such case-work, I act as a link between the Health Department, the Blind Welfare Service and the Eye Hospital, to facilitate record-keeping and prevent duplication of work. I also work with the ophthalmologist at the Blind Registration Clinics.

Statistics relating to blindness disability appear towards the end of this section.

Infectious Diseases

Miss E. Hatfield, health visitor, specialises in infectious diseases, and she reports :

My work consists of home visitation of patients suffering from notifiable diseases, e.g. malaria, meningitis, poliomyelitis, virus encephalitis and diphtheria (suspected and confirmed cases), measles, scarlet fever, whooping cough, chicken pox, mumps and german measles.

Advice is given to the relatives and guardians of the patient on the conduct of contacts, the prevention of the spread of infection and exclusion of children from school.

I liaise with the public health inspectors in cases of food poisoning and dysentery in young children, and give advice to parents regarding food hygiene in the home.

During 1957 the incidence of poliomyelitis was greater than in the previous year with a consequential increase in home visiting and visits to Ham Green Hospital and orthopaedic departments of general hospitals.

I carry out a considerable amount of welfare work for poliomyelitis patients with a permanent disability. Such patients are visited periodically and help and advice given.

Care of Premature Babies discharged from Maternity Hospitals

Miss E. Room, health visitor, reports:

There is one health visitor employed full time (a joint appointment by the Health Department and Southmead Hospital) and I give approximately half of my time to this work.

During 1957, 550 premature babies born in Bristol maternity hospitals received domiciliary follow-up care. Of these, 419 were discharged to their homes in Bristol, and 131 to surrounding areas in Gloucestershire and Somerset.

According to the mothercraft and home conditions the babies are visited weekly or more frequently. They are weighed and their progress is carefully observed. Supervision of feeds, oiling or bathing and minor treatments are sometimes carried out and advice on general care and management is given.

We co-operate closely with the appropriate district health visitors, hospital almoners and general medical practitioners.

Special follow-up clinics for premature babies held at Southmead Clinic are attended by the two premature baby health visitors.

When a baby reaches 9 to 10 lb. in weight, and is making good progress, the case is passed to the district health visitor who receives from the premature baby health visitor a report on progress. The mother is, at this stage, advised to attend the local infant welfare clinic. Where a baby fails to make satisfactory progress, or home conditions are poor, the premature baby visitor retains the case over a longer period.

Care of the Aged and Chronic Sick

The four health visitors who specialise in the care of the aged and chronic sick—Mrs. E. Sheen, Mrs. M. Aplin, Miss M. Harris and Miss M. Newns—report:

Senescence is a word much used nowadays and appears to be causing concern to everybody. Hospital beds are not easily available for the chronic sick, who only need general nursing care and attention. To overcome this difficulty and to assist friends and relatives in caring for the aged at home, the Public Health Department offers a special service.

A team of four health visitors follow up all cases brought to the notice of the Department by general practitioners, welfare officers, almoners, district nurses, mental health officers, national assistance officers and other sources.

The number of new cases dealt with during 1957 was 1,572. As there are already well over 4,000 cases known to the health visitors, it will be seen how great the need is in Bristol.

We pay initial visits to these sick people and take any action necessary, such as expediting admission to hospital, contacting the home help service, arranging mobile meals and chiropody (through the Council of Social Service), launderette service and friendly visitation by voluntary helpers.

The bed linen and laundry service and the nursing equipment service are of great value to chronic bed-fast patients. A lifting hoist was recently purchased by the Department and has proved most helpful in the nursing of helpless patients in their own homes.

The night watcher service, which is explained in more detail later in this report, is much appreciated by relatives and patients and helps us considerably in our efforts.

A record number of old and chronic sick patients have received the benefits of convalescence at the seaside or country. The proprietors of the various convalescent homes take an immense interest in their patients, even beyond that expected or arranged. One patient, by his courage, so impressed the proprietor of one convalescent home that she arranged for a television set to be installed in his home on his return. One can just picture his reaction.

Another useful contribution to the care of the aged is the Samaritan Fund, which enables people unable to attend a chiropodist to receive treatment in their own homes, and also provides nursing comforts.

When the case has been stabilised it is passed to the district health visitor for routine follow-up. We are available if further difficulties arise.

The Night Watcher Service

A night watcher service was started in January, 1957. The night watcher attends, as required, invalids and chronic sick cases, who are either living alone or who are in need of attention on a scale which cannot be provided by members of the household without detriment to their own health.

Their duties are those which would normally be carried out by relatives in cases of sickness and do not include professional or technical services more appropriate to a doctor or trained nurse.

The Chief Nursing Officer is responsible for the administration of the scheme but the investigation of cases and assessment of need is carried out by the health visitors for the aged and there is close liaison with general practitioners and district nurses.

Charges for the service are recovered according to means and all cases are considered by the Health Assessment Committee.

During the year the amount of work done by the night watchers was:

				<i>Nights Worked</i>
1st Quarter	..	..	..	103
2nd Quarter	..	..	..	91
3rd Quarter	..	..	..	142
4th Quarter	..	..	..	244
Total				580

The success of this service depends on the recruitment of the right type of person. Necessary qualifications are experience in tending sick people and a sympathetic and kindly disposition. There has been no difficulty in obtaining the services of such people who are all the middle-aged mature type. There is no doubt that this is a service which is greatly appreciated by patients and relatives alike.

Health Visitor Training

Mrs. J. Sangster (Sister Tutor) reports:

In the health visitors' training course, 1956-57, sixteen students completed the course and fifteen were successful in passing the examination of the Royal Society of Health, which was held in April, 1957. Four of the successful students are now health visiting in the City. The number of trained nurses applying for the health visitors' course in 1957-58 has been lower than usual, a trend apparent throughout the country.

Nursery Nurse Training

The Assistant Tutor, Miss Tarbuck, continued to take part in the training of nursery nurses at the Nursery Nurses Training Centre, Stoke Lodge, until July, 1957. She was responsible for the health instruction in the syllabus, which prepares students for the examination of the National Nursery Examination Board. In September Miss Tarbuck was granted leave of absence to take the Health Visitor Tutors' Training at the Royal College of Nursing. The Education Committee have now appointed their own full-time health tutor at Stoke Lodge, but close liaison is still maintained between the two Departments on the practical health training of the students.

Clinic Assistants

The clinic assistants have had one class each week. In the past they have been given an elementary knowledge of anatomy and physiology with the aim of helping them when they started nurse training. This year the classes have been concerned with the wider aspects of public health, with the aim of increasing their understanding of the work in the clinics and stimulating their interest in preventive medicine before they start sick nursing.

Student Nurses

Lectures on the public health services continue to be given to student nurses in hospital. Usually two lectures are given in the third year of training and these are followed by a visit to either Central Clinic or Southmead Clinic. This year the scheme has been extended to include the Bristol Royal Infirmary and the Bristol General Hospital.

Home Nursing Service

The Bristol District Nursing Association acts as the agent of the Local Authority in providing the home nursing service for the City.

Miss G. M. Grazier, Superintendent, reports as follows:

Staff at the end of December, 1957, numbered 101, consisting of:

Administrators	6
Queens Nursing Sisters	63
Queens Male Nurses	3
State Registered Nurses	5
State Enrolled Assistant Nurses	12
Part time staff	5
Student Nurses	7

The following work was undertaken during the year:

	1957	1956
Cases	8,934	9,420
Visits	275,741	272,088
	(inc. night visits* 2,447)	(inc. night visits 2,194)

(* Night visits are made between 8.0 p.m. and 8.30 a.m.)

It will be seen that compared with 1956, cases decreased by 486, but visits paid increased by 3,653, with a corresponding increase in late night visits of 253.

Analysis shows that we are nursing more of the terminal cases of carcinoma, cardiac failure, etc., and it is this increase in long-term cases which accounts for the increase in visits.

Antibiotics are not being prescribed so frequently for simple illnesses, so we have had fewer cases to attend for injections.

The Ministry of Health is interested in the effectiveness of the home nursing services in relieving the pressure on hospital beds—this is difficult to assess with accuracy, but is probably most effective in the case of elderly patients. In Bristol we have a fairly adequate staff and the use of the S.E.A.N. enables many chronic sick to be nursed in their own homes. This service, however, can often only operate satisfactorily by support from the Home Help, loan of linen, night sitter service as well as at least one responsible relative or friend. The acute surgical case is not usually discharged from hospital early enough for the district nursing service to relieve pressure on hospital beds.

Training

Twenty-six nurses were trained during the year, including four from Malta. The training course now includes lectures by a consultant in mental disorders and a visit to a mental treatment hospital.

Observation Rounds

During the year, 214 student nurses from the Bristol Royal Hospital, Southmead Hospital, and the Children's Hospital have accompanied members of the staff on a morning round. The patients seem to enjoy these visitors.

We continue to co-operate closely with the Medical Officer of Health and his staff.

The Home Help Service

Miss P. Walton, the Home Help Organiser, reports:

During the year 2,542 families were provided with home help compared with 2,258 during 1956.

The number of home helps employed on 31st December, 1957, was 491 (8 full-time and 483 part-time).

The following is an analysis of the types of cases helped and the number of hours worked during the year.

	Total cases	Total hours
(a) Maternity (including expectant mothers)	109	6,365
(b) Tuberculosis	69	7,858
(c) Chronic sick including aged and infirm	2,118	409,395
(d) Others	246	11,694
Total	2,542	435,313

Emergency Cases

Home help is of great value when sudden illness hits the mother of a family, especially if there is a young baby. Sometimes help is only required for a few days to enable arrangements to be made for a relative to come and stay for a time, but the help may be required for some weeks or even months. Recently a doctor applied for help for a young mother whose baby was only three weeks old and whose husband had been killed in an accident a week before the baby was born; there was another child aged six years. The mother was in bed with sub-acute rheumatic fever and the doctor stated that unless a home help could be provided she would have to go into hospital and this would mean breaking up the home. When visited, it was found that a neighbour was willing to go there in the afternoons and evenings so home help was arranged from 9 a.m. to 1 p.m. daily. This was a free case and the service was continued for nearly three months, but the mother recovered completely and the family was not separated during this period which was of special value in view of the sudden death of the husband.

Most emergency sickness cases are referred direct to me by the doctors and this is very helpful, as a correct diagnosis is given which enables a much more accurate assessment of need and duration of home help required.

Where the income of the family merits a full charge for the service, patients only keep the home help for as long as she is really necessary, but where the charge is negligible, some people exaggerate their symptoms in order to keep the home help. I am continually grateful to the medical practitioners of the City for their willing help in verifying illness or discounting alleged symptoms thus helping me to assess need; all information given is strictly confidential and the patient does not know that her statement has been checked with her doctor.

Tuberculosis

One of the encouraging signs of the times is that the number of cases requiring home help because of tuberculosis has only increased from 65 in 1956 to 69 in 1957. Most of these patients have been assisted for years and the number of new cases is relatively small.

Aged and Chronic Sick

During the year home helps went to the homes of 2,118 aged or chronically sick people. Many of these people would otherwise have had to be admitted hospitals or homes for the aged.

One of the most difficult problems is to supply help to old people who have rather dirty habits such as spitting, using a bucket instead of going to the toilet, refusing to wash or change clothing, or where there are cats which are not let out at regular intervals. Some old people never open their windows and will not allow the home helps to open them. One of the most frequent complaints by home helps is of "smells" particularly where the patient has ulcerated legs. One old lady, aged 88 years, lives in a bed-sitting room in which she sleeps, cooks and eats. Both her legs are badly ulcerated. The home help said, "She is a dear old lady, and I couldn't leave her, but the smell is terrible. She insists on making me a cup of tea and I haven't the heart to refuse it, but I drink it with my tummy heaving." Every effort is made to help these people but in some cases it is impossible to keep a home help in the home. Quite a number of home helps have resigned because of such cases and it is policy, after the home help has given the case a fair trial, to withdraw her and send her to less objectionable cases rather than lose her. A bottle of strong-smelling disinfectant sometimes does wonders for the morale of the home help.

It is not easy to persuade old folk to change their ways; they would rather have a grubby home than have help in the afternoon or on Saturday morning. The time for cleaning, they think, is in the morning; they have always done the cleaning in the morning and their shopping on Saturday morning and unless a home help is sent at their times they refuse to let her into the house.

In spite of all the difficulties the fact that help was given in 2,118 cases shows that with perseverance much can be done for the aged.

A tribute must be paid to the patience and understanding of the home helps. Many have said, "I felt so ill last week but I struggled to work because my old people are so dependent on me."

Welfare of Unmarried Mothers

During the year Miss Reed, the Welfare Officer, dealt with 469 cases; of these 346 were in respect of a first illegitimate child. The age range of the mothers is wide, but the greatest number continues to be between seventeen and twenty years of age.

Great restlessness is a characteristic of many of these young mothers; in many cases the background is unstable, the girl often coming from a broken home.

There appears to be an increased tendency for the mother to live with the putative father, an arrangement which often leads to serious difficulties and resulting in continued instability for the girl and her child. Day Nursery accommodation is a great help to those mothers who are working to maintain their children.

The City's Mother and Baby Home, Snowdon Road, has been kept practically full throughout the year, 42 new cases having been admitted. In addition, arrangements are sometimes made for admission to voluntary homes when Snowdon Road is full or when it is considered desirable in the girl's interest that she should leave the City.

Special Families

This has been the first complete year of operation of the six Area Case Committees for Special Families, which now cover the City. These Committees of local field workers with personal knowledge of the families have proved to be of value not only in keeping each individual worker informed of developments affecting the families, but have also resulted in better co-ordination of policy and action.

The Central Chief Officers' Conference has continued to meet monthly to discuss any special cases referred from Area Case Committees, and questions of mutual interest to the departments and organisations concerned.

In June, Dr. Cecile Hopkins was appointed as an Assistant Medical Officer to work primarily with special families. She, together with the three health visitors—Sisters M. D. Evans, M. E. Hughes and M. Long (a fourth health visitor has yet to be appointed) form a team which specialises in this work.

As a further development, the Health Committee have decided in the coming year to appoint two home helps to work with families, as members of the team. It is intended that these home helps will undertake rehabilitative work of a practical character in the home, giving instruction in cooking, cleaning, budgeting, washing, sewing, etc. Dr. C. Hopkins and the special health visitors comment as follows:

Special families are considered to be those whose standards of child care for known and unacceptable reasons are low. Case loads are approximately

50 per special health visitor and intensive work is carried out with approximately 16 families of each case load. Most cases passed to us have already been recognised and include those families which have proved intractable to the various social agencies.

The provision of scales for home weighing of babies and young children has been more than justified. To be able to weigh and so convince a mother that progress is not satisfactory, has proved the need. From time to time, too, children are weighed at the request of the district health visitors who greatly appreciate this extra service.

Help with essentials, such as bedding obtained through the special fund provided by the Health Committee for this purpose, is of incalculable value during periods of rehabilitation, and when dealing with families possessing few or none of these necessities.

Convalescent holidays and rehabilitation courses at Brentwood have been of great benefit to selected mothers and children, but in some cases where the need undoubtedly exists the matrimonial state makes this impractical.

Few of our families have accepted the idea of family limitation, many believing that it is wrong to interfere with natural processes. Our work involves close co-operation with the various statutory and voluntary agencies. District health visitors call upon us for advice and joint visits, particularly with regard to assessing social needs, and, in turn, will help us out in our difficulties. Schools, general practitioners and hospitals refer certain cases to us direct and we deal with any emergency, but whenever possible we discuss the case with the district health visitor first. Visits are made with the N.S.P.C.C. Officers when this is thought to be in the interest of the family concerned.

We feel that the following problems which affect these families are worthy of note:

- (1) A fortnightly rent collection in combination with a weekly wage.
- (2) Heavy hire purchase commitments.
- (3) Increased cost of travelling from new housing estates to places of work.
- (4) High costs of heating and lighting causing under-occupation of the house, with consequent overcrowding in one warm room in the colder months.
- (5) Lack of budgeting experience when living with relatives at a low rent, with consequent difficulties in keeping out of debt when re-housed.
- (6) Loneliness. On a new estate our families are frequently unacceptable to their neighbours.

Standards of living and of child care will vary from one area to another and we have sometimes felt that those expected from certain families are far beyond their reach. We consider that workers should assess child care and general hygiene at a level specific to the family under consideration.

Finally, from the medical standpoint, care must be taken that a diagnosis of "environmental defects" does not result in the oversight of a clinical condition, or affect a decision to carry out full clinical investigations, nor influence the interpretation of the results of such investigations. It is only too easy to apply a label "problem" to account for all the ills which beset our families.

Mr. A. Strange, Fieldwork Organiser of the Family Service Unit, reports:

The Bristol Family Service Unit, which operates on an agency basis for the Local Health Authority, provides a supportive casework service for families considered in need of help over a period. The Unit has a centre at Southmead,

and the staff consists of an organiser and two women workers, who carry out home visiting of a fairly intensive nature, according to the needs of the families.

The service is placed at the disposal of the other social services and, during the year, referrals were received from a variety of sources including the Health Department, School Welfare Service, National Assistance Board, Children's Department, Hospital Almoners, voluntary organisations, in addition to cases received through the official co-ordinating committee, on which the Unit is represented. A number of personal enquiries were dealt with, and several of these were accepted on a long-term basis.

The relationship offered by the Unit worker is aimed at enabling the family to cope more successfully with its problems, and to make more constructive use of the social services. The Unit's interest in the family frequently extends over a wide range of problems, and experience has shown that practical help in the home, and material aid, needs to be supplied in a manner which assists the family to retain its self-respect in the environment or community in which it lives.

During 1957 a total of 52 families were helped, and home visits totalled 3,008, whilst 1,512 enquiries were made on behalf of families. The difference between these figures and those of the previous year is explained by the absence, because of ill-health, of a member of the staff for the first twelve weeks of the year.

Of the 22 new referrals, 5 were families where there was no husband, and in a further 5 cases the husband was seriously incapacitated as a wage earner, because of either physical or mental ill-health.

Defective relationships within the home accounted for some of the more seriously disturbed cases; and in 8 instances there was serious parental disharmony, and in 6 others children's behaviour was symptomatic of severe tensions in the home.

At the more practical level, 14 families had acute financial problems, arising mainly from accumulated hire purchase and credit commitments. All the families were local authority tenants, and in 12 cases arrears of rent were such as to result in a threat of action on the part of the housing department. Other problems of a more tangible nature included home conditions, physical care of the children and deficiency of essential equipment and furnishings.

Even under the favourable industrial conditions of the past few years, there appeared a need for a form of sheltered employment for those who, because of personality difficulties, could not cope with the demands of normal employment. In spite of this, until recently the social worker's approach to employment problems has been a relatively optimistic one, but during 1957 increasing unemployment carried a special threat for the unskilled group, and, towards the end of the year, several husbands with excellent work records were experiencing anxiety and frustration in their efforts to find employment.

During the year the Unit has been fortunate in having the services of Mrs. F. Bodman (psychiatric social worker) who has visited the Unit to discuss with workers some of the more difficult emotional problems in the homes.

Talks on the work of the Unit were given to a conference of School Medical Officers, groups of student Health Visitors, social science students, medical students and prison officers. Visitors to the Unit included social workers from Holland, Ceylon, Afghanistan, Jamaica and Hong-Kong.

As in previous years, the Unit has received valuable support from officers and fieldworkers of both statutory and voluntary agencies, and it is gratifying to note that such liaison has been achieved through mutual concern to assist families considered to be in need.

Statistics

Table I—Maternal and Child Welfare

Notifications (Bristol residents)

(1) Live births	7,101
(2) Still births	155
(3) Premature births (included in (1))	450
(4) Births at home	1,731
(5) Births in institutions	6,648

*Clinic attendances:**(a) Ante-natal Clinics:*

(1) Medical Officer's sessions	10,182
(2) General Practitioner sessions	20,258
(3) Consultant sessions	8,896
(4) Midwives sessions	4,802

(b) Post-natal attendances

(1) Medical Officer's sessions	} 4,755
(2) General Practitioner sessions (Including 1,633 at Ante-natal sessions).	

(c) Child Welfare Centres

(1) Total number of infants under 1 year	5,718
Total attendances of infants under 1 year	70,330
(2) Total number of children 1-5 years	3,439
Total attendances of children 1-5 years	25,872

(d) Special Clinics

(1) Sub-fertility clinic	
Attendances	1,738
New patients	213
(2) Backward children	
Attendances	56
New patients	19
(3) Diagnostic clinic	
Attendances	678
New patients	245

*Health Visitors:**Home visits:*

Ante-natal	1,764
Primary	6,578
Infants under 1 year	33,111
Children 1-5 years	49,830
Other visits	19,595
Blank visits	14,365

Sessions attended

Clinics	5,364
Nursery schools and classes	1,684 hours

Recuperative Convalescence:

Mothers accompanied by children	{ 36 mothers 80 children
Unaccompanied children	
Adults (including 100 over 65 years)	2 141

*Welfare of Unmarried Mothers:**Number dealt with during year:*

(1) First illegitimate baby	346
(2) Second illegitimate baby	76
(3) Third or more illegitimate baby (Usually cohabiting)	47
Number admitted to City's Home, Snowdon Road	42
Number admitted to other Mother and Baby Homes	8
Number admitted to Grove House Hostel	4

Table 2—X-Ray Section

The following are the numbers of X-Rays carried out at the Central Health Clinic during 1957:

<i>School Health Service:</i>	1957	1956
Referred from Minor Ailment Clinics, etc. . .	526	731
Referred by consultants:		
E.N.T. 770		
Orthopaedic 271	1,041	988
Teachers' periodic X-Rays of chest	799	586
<i>Tuberculosis Service:</i>		
Adult contacts	190	
Child contacts	1,046	
Children inoculated with B.C.G.	1,994	3,449
<i>Maternal and Child Welfare Service:</i>		
Children under 5	5	30
Mothers—X-Rays of chest	4,261	3,704
Mothers—X-Rays of abdomen	225	279
<i>Staff Medical Examinations and Periodic X-Rays</i> <i>(excluding Teachers):</i>	2,983	2,860
<i>Miscellaneous</i>	126	182
Total No. of Films Taken	13,196	12,809
Total No. of Persons X-Rayed	12,003	11,650

Table 3—Dental Treatment

	<i>Examined</i>	<i>Needing Treatment</i>	<i>Treated</i>	<i>Made Dentally Fit</i>
Expectant and Nursing Mothers	675	647	645	660
Children under 5	1,839	1,798	1,733	1,702

	<i>Scalings and Gum Treatment</i>	<i>Fillings</i>	<i>Silver Nitrate Treatment</i>	<i>Crowns or Inlays</i>	<i>Ex-tractions</i>	<i>General Anaesthetics</i>	<i>Dentures</i>		<i>X-rays</i>
							<i>Full Upper or Lower</i>	<i>Partial</i>	
Expectant and Nursing Mothers	387	901	—	—	1,704	412	146	82	68
Children under 5	—	528	1,041	—	2,937	1,520	—	—	—

Table 4—Prevention of Blindness
Analysis of Causes of disability as shown by B.D. 8 Forms for 1957

Cause of Disability

	<i>Cataract</i>		<i>Glaucoma</i>		<i>Retro-lental Fibroplasia</i>		<i>Others</i>	
	<i>Blind</i>	<i>P/S</i>	<i>Blind</i>	<i>P/S</i>	<i>Blind</i>	<i>P/S</i>	<i>Blind</i>	<i>P/S</i>
1. No. of cases registered during the year, in respect of which para. 7c of Form BD8 recommends:								
(a) No treatment	5	2	5	—	—	—	40	5
(b) Medical, surgical or optical treatment	10	5	12	1	—	1	25	5
2. No. of cases of 1 (b) above, which on follow-up action, have received treatment	5	3	10	1	—	1	19	3
3. No. of cases where surgery not possible on general health grounds	5	1	1	—	—	—	5	—
4. No. of cases of 1 (b) above, refusing treatment	—	1	1	—	—	—	1	2

No registrations due to ophthalmia neonatorum

Blind Return—Year Ending 31.12.57

New cases registered blind	97
New cases registered partially sighted	18
Total patients seen at Clinic	107
Number of sessions	31
Domiciliary visits registered blind	8
Domiciliary visits registered partially-sighted	4
Total domiciliary visits paid	20

Vaccination against Poliomyelitis

During the year the programme of vaccination against poliomyelitis, which was initiated in the previous year, was considerably increased.

The vaccine employed was made in Britain and from its use in the previous year it had been shown to be both safe and effective. It is similar to the widely used Salk vaccines which are prepared from the three main types of poliomyelitis virus. In the preparation of this vaccine a different strain of Type 1 virus was used—the less virulent Brunenders strain was substituted for the Mahoney strain—for additional safety. The vaccine, which was then manufactured by only one firm in Britain, was provided and allocated by the Ministry of Health. Production and testing of these vaccines are most difficult and complex, so it was not surprising that supplies were received at irregular intervals and in varying amounts. Arrangements to inoculate children could not therefore be planned in advance. It was, furthermore, highly desirable to get the children inoculated as quickly as possible, particularly as Bristol throughout the spring had a series of cases of paralytic poliomyelitis which might have foreshadowed a major epidemic later in the year. The special storage conditions and particularly the requirement that the contents of any partly used vial must be used within twenty-four hours of the initial use, increased the difficulties even further.

The year started with plans being made, as a result of Ministry of Health Circular 22/56, to resume inoculations when the vaccine became available. Discussions were held regarding the participation of general practitioners in the programme. The Local Medical Committee decided, in view of the difficult storage requirements and in order to avoid wastage of the scarce vaccine, that general practitioners should not take part in the programme until supplies were more plentiful.

The first issue of vaccine was received in March and was sufficient for 1,532 children. In the previous year 19,831 children (born in 1947–54) were registered for vaccination and by the end of the year 1,784 of these had completed their course of injections. A start was therefore made with the children waiting from the previous year. To overcome difficulties of selection, the month of birth of a child was used starting with those born in January, then those born in February, and so on. A child was given an appointment at the clinic chosen by the parent and then during this visit was given an appointment for the second injection exactly four weeks later.

In May, Circular 6/57 from the Ministry of Health advised that vaccination could be continued during the summer and that further children should be registered for vaccination. The children concerned were those born in 1955 and 1956 and any children born in 1947/54 who had not hitherto been registered. Vaccination was therefore continued throughout the summer as supplies of vaccine became available. Registration of these further children was carried out, mainly at the clinics, during June and July so that a return could be sent to the Ministry of Health on August 1st. Registration was continued after this and revised figures sent at the end of each quarter to the Ministry.

Supplies of vaccine continued to be disappointingly small so that during the whole of 1957 only 14,850 children had received two inoculations. None of the children registered in the summer had received their injections during the year.

The parents of a few children who suffered from asthma, penicillin sensitivity, or other allergy, enquired about the safety of the vaccine. Although it was thought that no danger existed, arrangements were made—when a doctor considered it necessary—for the child to have the injections with the following precautions. The child was given anti-histamines the day before, the day of, and the day after the injection, which was itself divided into a smaller first part, and about four hours later the remainder of the dose. These precautions were repeated for the second injection.

In November, Circular 16/57 from the Ministry of Health extended the offer of vaccination to all children under the age of fifteen, and to expectant mothers. In order to supplement the inadequate British supply, Salk vaccine was to be supplied from Canada and the United States. This Salk vaccine, as well as being tested in the country of origin, would have to pass the same tests as are applied to the British vaccine. Parents were to be given the option of refusing Salk vaccine, but inoculations before the next summer could not be guaranteed with British vaccine. With the increased supplies vaccination with Salk vaccine was to be offered to certain groups especially exposed to infection, such as general medical practitioners, ambulance staff, and certain hospital staff, and their families.

Arrangements were made for registering eligible children (mainly through the schools by the kind co-operation of the Head Teachers) and other persons. This involved a considerable rush to complete it before the schools closed for Christmas and to prepare, for the Ministry of Health, figures of those waiting at the end of the year.

Discussions also took place with the Local Medical Committee when it was decided that parents could choose to have their children inoculated either at the clinic or by their own doctor (if he was willing). Parents of children who were already registered and were not expected to be inoculated within the next month, were all given the options (*a*) of receiving either British or Salk vaccine and (*b*) of having the inoculations either from their own doctors or at the clinic. On January 4th, 1958, a total of 51,619 children had been registered, i.e. just over half of those eligible for registration (born 1943–1957).

It was expected and hoped that a very considerable programme of inoculations would start early in the New Year, so considerable preparations were made for this in the last part of 1957. As well as the preparation, printing, distribution, and sorting of tens of thousands of registration cards, the parents of the 12,000 children already registered were sent a form to give them the two options. Notices and publicity were arranged to increase the response. It was also necessary to obtain and train additional staff, to provide office space and equipment, to increase the pool of transport, and to provide more refrigerated space.

During the year the sterilised syringe and needle service in the dispensary was considerably expanded. This service provides the sterilised syringes and needles for the vaccinations against poliomyelitis and other injections given by the Department. Used syringes and needles are sent from the clinics to the dispensary. The syringes are washed, cleaned, dried, lubricated, and each in a sealed container is baked at 160° C. for two and a half hours. The needles are washed, dried, tested, sharpened and, in sealed jars of twenty-four, are baked at 160° C. for two hours.

At the start of the year the capacity was approximately 200 needles and under 50 syringes per week. This was gradually increased, both to provide for the programme of poliomyelitis vaccinations and to provide for all inoculations in nursery schools and classes. One problem was the heavy demands when issues of vaccine were received, with only small demands in the intervals. This was met by increasing the stocks of syringes and needles so that reserves of sterilised needles and syringes could be built up in the intervals.

The moderate increase in capacity together with the larger stocks were clearly inadequate for the programme foreshadowed in Circular 16/57. Plans were therefore commenced to expand the capacity to 3,000 to 3,500 needles and nearly 1,000 syringes per week. It was necessary to extend into additional premises, as well as to obtain additional equipment and to train staff. At the time of peak demands syringes would be boiled three or four times and needles once or twice at sessions before return to the syringe service.

Vaccination against poliomyelitis in 1957

<i>Year of Birth</i>	1947	1948	1949	1950	1951	1952	1953	1954	<i>Total</i>
<i>No. Completed</i>	3,404	3,175	2,839	2,694	1,013	760	587	378	14,850

Inoculations

					<i>Local Authority</i>	<i>1957 General Practitioners</i>	<i>Total</i>
<i>Diphtheria</i> (whether combined with Whooping Cough and/or Tetanus or not) ..							
Full course: Under 5 years of age					2,735	2,095	4,830
Between 5 and 15 years of age					56	46	102
Booster dose: Under 15 years of age					970	893	1,863
<i>Whooping Cough</i> (whether combined with Diphtheria and/or Tetanus or not), etc.							
Full course: Under 5 years of age					2,586	2,061	4,647
Between 5 and 15 years of age					47	46	93
Booster dose: Under 15 years of age					370	581	951
<i>Tetanus</i> (whether combined with Tetanus-Diphtheria-Whooping Cough Triple Vaccine or not) etc.							
Full course: Under 5 years of age					1,798	1,072	2,870
Between 5 and 15 years of age					17	25	42
Booster dose					1	76	77

					<i>Under 5</i>	<i>Between 5/15</i>	<i>Total</i>
<i>Diphtheria Immunisation</i> (whether combined with Whooping Cough and/or Tetanus Immunisation or not)							
Six months ended 30th June, 1957					2,489	42	2,531
Six months ended 31st Dec., 1957					2,341	60	2,401
<i>Whooping Cough Immunisation</i> (whether combined with Diphtheria and/or Tetanus Immunisation or not)							
Six months ended 30th June, 1957					2,380	49	2,429
Six months ended 31st Dec., 1957					2,267	44	2,311

Smallpox Vaccination

Number of persons vaccinated (or re-vaccinated) 1957

<i>Age at time of Vaccination</i>	<i>Under 1 year</i>	<i>1—</i>	<i>2—</i>	<i>5—</i>	<i>15 and over</i>	<i>Total</i>
No. Vaccinated ..	2,326	152	173	202	213	3,066
No. re-Vaccinated ..	316	15	32	79	386	828

Dispensary

1956

1957

Establishments Served:

	Health Centres and Clinics	35	
	Residential Institutions	26	
	Day Nurseries, Day Special Schools, Nursery Schools and Classes	39	
	Other Establishments	21	
	Municipal Midwives and Pupils	39	
671	School First Aid Sets .. .. .	..	636
1,687	Gas and Air Apparatus Servicing .. .. .	..	1,825

Turnover of Drugs:

358½	Mixtures made	Gals.	315½
514	Ointments made	lb.	567
35½	Powders made	lb.	54
499	Other Medicines Dispensed	Gals.	498
132	Vitamin A & D Emulsion	Gals.	61
18	Vitamin A & D Capsules	1,000	7
3,170	Diphtheria Prophylactic P.T.A.P. or F.T. or T.A.F. ..	ml.	2,809
17,100	Combined Diphtheria—W. Cough Vaccine ..	ml.	7,360
2,670	Tetanus—Diphth.—W. Cough Vaccine	ml.	15,190
2,450	Whooping Cough Vaccine	ml.	2,040
493	Tetanus Toxoid	ml.	863
469	Lint	lb.	410
814	Cotton Wool	lb.	846

Bulk Purchase of Drugs:

1,180	lb.	Kgm.	787½
292½	Gals.	Litres	1,159½
625	Tabs (1,000)	Tabs (1,000)	1,105

THE MENTAL HEALTH SERVICES

Dr. H. Temple Phillips

*(Chief Assistant Medical Officer of Health and Senior Medical Officer
for Mental Health)*

and

F. Morton

(Mental Health Officer)

Introduction

The major event of the year, in the mental health field, was the publication, in May, of the report of the Royal Commission on the Law Relating to Mental Illness and Mental Deficiency. A special meeting of the Mental Services Sub-Committee was held, in September, to consider this. The salient features of this lengthy document are:

- (i) its reaffirmation of the continued need for public enlightenment on mental health matters;
- (ii) its approach to the problem of breaking down the artificial barrier between mental and physical ill-health, by sweeping away formal legal procedures wherever possible, and permitting admission to hospital for mental disorder on the same basis as that for physical illness;
- (iii) its recommendation for a revised and simplified procedure, applicable to all forms of mental disorder, for those cases where compulsory care is still required;
- (iv) a new classification of mental disorder, which includes the somewhat controversial group of "psychopathic persons";
- (v) a new and vastly increased emphasis on the provision of community care services.

At present these are nothing more than recommendations, but they point the way towards new legislation in the not-too-distant future. It is, of course, those recommendations relating to community care which are of greatest significance as far as Bristol and other local health authorities are concerned. These include the provision of residential accommodation for various classes of patients, including some who are at present provided for in hospitals; an extension of occupation centre (or "training centre") facilities; increased responsibility for the after-care of patients discharged from hospital; the provision of assessment clinics for patients thought to be severely subnormal or psychopathic; and a general increase in the social services available for the care of patients in the community. In addition, the report recommends the dissolution of the existing Board of Control, some of whose functions would pass to local health authorities.

The full implementation of these recommendations would call for considerable increases in staff and heavy capital and annual expenditure. There is as yet no indication of the extent to which such expenditure might be financed from the central exchequer.

It is, however, heartening to find that in Bristol many of the Commission's recommendations have either been already implemented, or, if not, have already engaged the active consideration of the Committee.

In the mental deficiency field, the year has seen the development of sheltered workshops in the Industrial Centre, where patients carry out simple work for outside firms. This gives them a sense of achievement which was lacking with the traditional handicraft activities which they formerly undertook. The sheltered

workshops will increase in importance if the trend towards unemployment continues, as mental defectives are likely to be the first to lose their jobs. Unfortunately, however, it is becoming increasingly difficult to find suitable work which can be undertaken on behalf of outside firms.

The demand for occupation and industrial centre accommodation continues to grow, and overcrowding has now become a serious problem. A new workshop, accommodating 25 boys, has been opened during the year, and an additional assistant supervisor (male) appointed.

Continued efforts have been made to obtain suitable premises for use as a hostel for male mental defectives, but so far this project has not reached fruition. At the close of the year the Committee was still exploring the possibility of obtaining vacant possession of Mortimer House and Nos. 11 and 12 Mortimer Road. It is clear from letters published in the press that there is still a great deal of misconception in the public mind as to the nature of the patients whom it is proposed to accommodate in such a hostel, and the danger of their misconducting themselves has been grossly exaggerated. Much has been done to spread enlightenment, both by official bodies, and by voluntary organisations such as the National Association for Mental Health, the National Association for Mentally Handicapped Children, and Leagues of Friends of Mental Deficiency Hospitals, but old prejudices die hard.

In the field of mental illness, the year has not seen any striking changes, though the number of cases dealt with by the mental welfare officers has shown a $6\frac{1}{2}$ per cent. fall compared with 1956. This is the fourth year in succession when a decrease has been recorded, and the figure for 1957 is actually the lowest since 1951. At the end of the year, too, there were signs that the pressure on mental hospital beds was easing slightly—though it is as yet too early to say whether this is any more than a passing phase.

Whilst much of the work has perforce to be devoted to caring for the mentally ill and defective, the truest function of the mental health services—that of prevention—has not been lost sight of. Taking the long view, the field which offers the greatest scope for true preventive mental health is that of maternal and child welfare, and an account of recent developments in this direction is to be found elsewhere in this annual report.

Establishment and Staff

Dr. Lumsden Walker was appointed in October 1957 as a consultant psychiatrist on a sessional basis. At present he conducts family guidance clinics on two afternoons each week (at the Central Health Clinic and at Charlotte Keel Clinic).

During the year it was decided to alter the designation of one of the five posts of psychiatric social worker to that of senior psychiatric worker. This vacancy, however, has not yet been filled.

The two posts of assistant mental welfare officer have been widely advertised, but by the end of the year it had not yet been possible to make an appointment.

A part-time teacher of the deaf was appointed, and commenced her duties in October 1957, attending at Marlborough House on two afternoons each week.

Although establishment remains for full-time service, the speech therapist has been unable to attend for more than two sessions per week since 1st September, 1957.

Early in 1957 the Committee agreed that the number of sessions undertaken by the psychologist be increased from two to four per week.

The appointment of an additional assistant supervisor (male) to work in the Industrial Centre was approved, and Mr. Marcisz commenced duty on the 9th December.

Additional part-time domestic help was also engaged in the occupation centre.

Training Courses

A further course for parents of mentally handicapped children, consisting of eight lectures and discussions, was held from February to April, 1957, in conjunction with the Bristol Education Authority (Institute of Further Education). Subjects covered included the handling of backward children at home, speech training, movement training, learning difficulties, and institutional care.

A refresher course for officers engaged in the mental health services was held in conjunction with the University of Bristol at Clifton Hill House from 1st to 5th April, 1957. The subjects considered included: present trends in mental health services in this country; topical aspects of mental health legislation; the psychologist and mental health; epilepsy in relation to mental illness; geriatrics in relation to mental health; preventive mental health in relation to maternal and child care; and problems of borderline defectives. Visits were also paid to the Burden Neurological Institute and to Leyhill Prison. Four members of the staff attended this course.

Three members of the occupation centre staff continued to attend throughout the year the in-service diploma course being run in Bristol by the National Association for Mental Health.

Mental Deficiency

At the end of 1957, there were 1,772 mental defectives known to the local health authority. This represents a total mental deficiency rate of 4.03 per thousand, as compared with 4.07 per thousand in 1956.

The number formally receiving care under the Mental Deficiency Acts was 1,635. This represents a rate of 3.72 per thousand, as compared with 3.81 per thousand in 1956.

Of the 1,635 formally ascertained cases, 683 (42 per cent.) were in hospital or on licence from hospital, and 952 (58 per cent.) were receiving care in the community.

Details of the numbers of mental defectives under care since 1949 are given in the following table:

<i>Year</i>	<i>In Hospital and on Licence</i>	<i>Under Statutory Supervision</i>	<i>Under Guardian- ship</i>	<i>Receiving Voluntary After-Care</i>	<i>Pending Formal Ascertainment</i>
1949	676	736	65	72	29
1950	678	804	56	116	24
1951	685	857	54	147	17
1952	670	876	43	210	15
1953	665	932	51	105	58
1954	657	972	46	113	59
1955	669	1013	42	116	47
1956	678	962	40	91	24
1957	683	911	41	107	30

Waiting List

At the commencement of 1957, there were 14 names on the list of persons awaiting admission to mental deficiency hospitals; during the course of the year 36 names were added, making a total of 50.

Of these, 25 were admitted to hospital, one died and in three cases the application for admission was withdrawn. (Two children were removed from the list, at their parents' request, following stabilisation whilst attending the Occupation Centre). Thus 21 patients were awaiting vacancies at the end of the year.

Twenty-six urgent cases were admitted to hospital during the year, in addition to those admitted from the waiting list, making a total of 51 admissions during 1957.

Temporary Care

There has been a considerable increase in the demand for temporary care under the provisions of Ministry of Health Circular 5/52, and accommodation was arranged for 55 patients during 1957, as follows:—

		<i>Male</i>	<i>Female</i>	<i>Total</i>
To: Hortham-Brentry Group	..	20	13	33
To: Stoke Park Group	..	10	12	22
		<hr/>	<hr/>	<hr/>
		30	25	55
		<hr/>	<hr/>	<hr/>

The numbers dealt with in this way each year have been as follows:—

1952	..	3	1955	..	26
1953	..	15	1956	..	26
1954	..	16	1957	..	55

Occupation Centre

At the end of the year the number of patients on the register totalling 250, was as follows:—

		<i>Males</i>		<i>Females</i>	
		<i>Under 16</i>	<i>16 and over</i>	<i>Under 16</i>	<i>16 and over</i>
Occupation Centre	..	64	1	51	58
Industrial Centre	..	7	69	—	—

Throughout the year there has been a steady increase in the number of applications for admission, and the following summary, indicating the number on the register and the average attendance, illustrates the increase over the last ten years.

<i>Year</i>	<i>No. on register</i>	<i>Average daily attendance</i>
1948	120	97
1949	152	88
1950	166	91
1951	165	99
1952	180	134
1953	208	157
1954	219	175
1955	227	166
1956	234	183
1957	250	199

The centres are now accommodating the maximum number possible and any further increase must undoubtedly result in a falling off in the standard of training and an increasing strain upon members of the staff.

For some years the committee has been considering the provision of a new occupation centre in Bristol, but this matter had to be postponed because the Regional Hospital Board had an option on the proposed site in connection with a new hospital for South Bristol.

The Regional Hospital Board have now intimated that they no longer require the site.

In view of the urgent need for additional accommodation, a provisional scheme for a new occupation and industrial centre was approved in principle by the committee and plans have been prepared for submission to the Ministry of Health.

General Health

Although there was the usual incidence of minor seasonal disease, the health of the pupils has been generally good.

Eighty-five patients were affected by Asian influenza in the autumn, however, and 20 cases of mumps and 15 cases of measles were reported.

During the year all the children have been medically inspected, and a number have required specialist and dental treatment. Full use has been made of the facilities available at the Central Health Clinic. The health visitors have continued to carry out weekly inspections.

Psychologist's Report

The functions of the psychologist at the Occupation Centre are two-fold, i.e., diagnostic and advisory.

(a) Diagnostic Work

- (i) A check is kept on individual children to make sure that they are receiving the training most suited to their capacities. For this purpose all children admitted to the Centre are seen at least once, and more often where their condition is subject to change, e.g., in cases of brain injury, emotional disturbance, and epilepsy.
- (ii) An interview is arranged at the age of sixteen to find out whether the patient should be put forward as a candidate for outside employment.
- (iii) Patients under supervision, but not in attendance at the Centre, are interviewed in connection with possible attendance, employment, etc.

(b) Advisory Work

- (i) Help is given with the present programme of fitting the older defectives for work outside or inside the Centre. The psychologist can help in this way by advice on methods to be used in keeping work records, by interviews with individual patients who are failing in some respect, and by advising on methods for measuring progress objectively.
- (ii) Advice is given on children in the Occupation Centre who are getting into difficulties.

Work during 1957

Seventy routine examinations were carried out. One boy was returned to the education system in accordance with Section 8 of the Education (Miscellaneous Provisions) Act, 1948. Eleven were interviewed as to employability and so far two have been successfully placed in employment. Six were referred by Occupation Centre staff for advice. Ten were referred from outside the Centre for diagnostic interviews.

Speech Therapist's Report

During the year 1957, there was full-time speech therapy from January to September. From September until December, it was part-time only—two mornings each week.

Forty-two patients were regularly treated. They were mainly children from the lower age groups, as it was felt that these would benefit most. However, four cases from the over-17 age group were treated, and two showed a definite improvement.

Treatment continued on the principle of giving individual attention by the therapist and group speech training by the teachers. The co-operation between teacher and therapist has been found to be most important. Co-operative parents have also been very helpful.

Detailed case histories have been kept and most of the cases have been diagnosed as retarded speech, dyslalia, and hyper-nasality. There are two cases of aphasia and one of cleft palate.

In April 1957 a tape recorder was acquired and this has proved most helpful in treatment. It is used mainly for ear-training purposes, and the patients showed great interest and some understanding when hearing their own voices.

Teacher of the Deaf

Of the 250 children and adults attending Marlborough House, 126 have been tested since October 1st, 1957. Only three of the adults have been found to have any significant deafness. Two of these have been given auditory training, and are responding well, but the third is so severely handicapped by her mental deficiency that it is impossible to begin any training.

It will be necessary to re-test some of the younger children by audiometry, to explore the possibilities of a less easily recognised partial deafness. This will be possible in the near future when more equipment is available.

Margaret Morris Movement

The classes have continued to fulfil a most useful function in the scheme of occupation centre training. Considerable remedial benefit has been derived by the children from the exercises, which they find both interesting and stimulating. The group consists of four classes.

The first class is made up mainly from the nursery group boys and girls, and in this the objective is to teach them the rudiments of breathing, posture, body control, and rhythm. The second class consists of a mixed group of junior girls. Here there has been a great accomplishment, based on progression of their earlier work, plus balance and muscular control. Also the first lessons towards free movement and improvisation are given. These lead to the development of initiative and group responsibility, as well as to a fuller appreciation of and response to music and design.

The third class is composed of the most able girls from the intermediate section. Again, of course, their work is a progression on that of past years, with the added technique of spring and complicated co-ordination. Free movement and improvisation are taken further and dances are taught.

The fourth class is composed of senior low-grade girls. This class is taken in a more recreative way although the basic elements of breathing, posture, and general remedial work, together with rhythm and creative expression, are adhered to.

Holiday Recreation and Social Activities

Arrangements were made during the summer for 37 girls and 41 boys to attend the Bristol Youth Committee's camp at Orcombe Point, Exmouth, where they were able to enjoy a holiday under the surveillance of the staff. A coach trip and other outings were also arranged and appear to have been most successful.

Following the gift of football clothing and equipment by Bristol Rovers Football Club, and cricket clothing by the Bristol branch of the National Association for Mentally Handicapped Children, regular sports fixtures have been arranged with various hospital groups.

A Rediffusion radio system has been installed in all workshops and the dining hall, the cost of installation and the annual rental being met from the Sheltered Workshops Fund.

Regular cinema shows have been arranged throughout the winter months, and the Scouts, Cubs, Guides and Rangers have continued their activities.

In the Scout "den," the inadequacy of the fire precautionary arrangements caused the Committee some anxiety (following a report by the Chief Fire Officer). Panelling was removed and an existing tunnel in front of the house was converted into a fire escape. All the staff have been issued with instructions in elementary fire precautions, and regular fire drill has been undertaken.

Industrial Centre

Early in the year, the Health Committee approved in principle the setting up within the Industrial Centre of workshops in which contractual work for local manufacturers could be carried out (this to be in addition to the work of boot and shoe repairs, brush making, mat making, woodwork and general handicrafts).

Approaches were made to various Bristol firms and, as a result, suitable work was obtained. In the first instance, a selected group of 18 young men was given the task of repairing sugar bags, which had been inadequately sealed in the course of machine production in a paper bag factory. The men showed considerable enthusiasm for the work, which they performed most capably.

In May, this group of male patients transferred their attention to the task of assembling fountain and ball-point pens, and of carding and packing the finished articles. The work of repairing paper bags was given to 20 adult female patients, who quickly proved themselves as efficient as the men.

In October 1957, a further contract was entered into with another firm of paper bag manufacturers. This work consisted of cording carrier bags and counting and packing the completed bags.

At the end of 1957, 20 girls and 36 men were occupied on the main tasks set out above, in three workshops set aside for the purpose. A considerable amount of work was accomplished during the year to the satisfaction of the three manufacturers. Payment has been made to the Corporation by the firms, and from the amount received a proportion has been paid as pocket money to all the patients engaged. The balance has been used as a Patients' Amenities Fund for the provision of such articles as wireless sets, and for expenditure in connection with Christmas activities, entertainments and the summer camp.

It has been observed that the provision of the "sheltered workshop" has helped to stabilise a number of boys and girls attending the centre, and has given them an additional interest. In almost every case, patients permitted to partake in the workshop activities have proved themselves to be industrious. There has been a marked improvement in concentration and it is hoped that it may eventually be possible to set aside a small workshop in which a limited number of high grade patients can be employed and receive a wage for the work they perform.

All the young men and women who have hitherto taken part in this scheme have been considered unemployable in any but sheltered conditions. There is, however, an increasing tendency for high grade patients who are under supervision to return to the Industrial Centre following redundancy in employment

and extra provision is also having to be made for the occupation of boys and girls who are unable to find employment on leaving Special Schools.

Appreciation is expressed for the understanding and co-operation received from the three manufacturers who have supplied work. It is hoped to be able to extend the scheme in due course and to obtain some form of metal work for the higher grade male patients. Unfortunately, the difficulties of obtaining suitable tasks have been heightened by the increasing incidence of unemployment in the City, which limits the amount of work which employers are prepared to put out to contract.

Marlborough House Parent-Teacher Association

A year of varying activities is reported by the Association. Whilst there is scope for more members, there exists an excellent spirit of goodwill between the members of the staff and the parents. The Association is of great value, bringing as it does the desire to serve to the full those attending the Centre, and affording many opportunities of social service.

From the social aspect, a dancing display provided funds for the purchase of a film-strip projector for use in the Occupation Centre. The Association arranged an outing to Sand Bay for those attending the centre, and a Garden Party was held at Marlborough House. A Harvest Supper was arranged, following the Occupation Centre Harvest Festival.

It has been the desire of the Association to raise funds for making a sound film, in colour, of the activities of the Occupation Centre, at a cost of approximately £100. It had been hoped that this would have been made in 1957, but it was felt that such an ambitious scheme should wait until all the money was available. At the time of writing, the whole of this amount has been raised and has been earmarked for this purpose.

After-Care of Mental Defectives

In the annual report for 1956, it was anticipated that there would be an increase in the number of patients discharged from order of the Mental Deficiency Acts, as a direct result of Ministry of Health Circular 56/25, advising discharge from licence after a period of twelve to eighteen months. As can be seen from the following table, this has indeed proved to be the case, and the number of patients listed in the after-care register has increased during the year.

<i>Mental Defectives Receiving After-Care in the Community</i>				<i>Male</i>	<i>Female</i>	<i>Total</i>
At 31st December, 1956	..	..	..	51	40	91
Added to register during 1957	..	..	..	14	21	35
Total				65	61	126
Discharged from after-care during 1957	..	..	..	12	7	19
Remaining at 31st December, 1957	..	..	..	53	54	107

Every effort has been made to rehabilitate patients discharged from hospital and to provide suitable employment and accommodation. In 19 cases the result achieved has been so satisfactory that visits have been discontinued.

The numerous problems which are always experienced by the social worker engaged in this task have been intensified during the year by the unfortunate trend towards unemployment. A number of patients on the register have become redundant during the year and it has proved difficult to find alternative jobs for them. This problem has been most noticeable with men and women

recently discharged from order who are of mature age, have been in hospital for some years, and are without the advantage of domestic or industrial experience.

This problem is illustrated by the following cases:

Case No. 1

This patient was placed under statutory supervision in 1922. He was unable to retain employment and attended the Industrial Centre in Bristol for four years. Owing to behaviour problems he was placed under order in October 1930, being admitted to hospital. In hospital his conduct was so unsatisfactory that for the nine years from 1936 to 1945, he was detained in a State Institution.

He remained under care in mental deficiency hospitals continuously for a period of twenty-seven years, but has now been discharged from order of the Mental Deficiency Acts and returned to the community at the age of fifty-five years. He has one known relative who, although living in Bristol, will have nothing to do with the patient, and whose whereabouts are unknown to the patient.

Immediately it was known that this man was to leave hospital, an urgent quest was made to find accommodation and employment for him. The various men's hostels such as Y.M.C.A., Salvation Army, and Church Army Hostels, had no vacancy to offer. Eventually the social worker undertaking after-care was successful in placing the man in residential work as a hotel kitchen hand.

Unfortunately he quickly failed in his employment and was discharged. He has a relatively high intelligence quotient, but is extremely slow and is lacking in experience. It again became a matter of urgency to find accommodation for him, and this was only accomplished after the social worker had visited numerous possible lodgings and pleaded his case with landladies.

Further employment cannot be found, but it is hoped that a course of training at the Industrial Rehabilitation Unit will be arranged. In the meanwhile, he attends the Marlborough House Industrial Centre and receives a National Assistance allowance to cover the cost of board and lodging.

It is anticipated that this man will need close support for a long time and there are grave doubts as to whether he will ever become stabilised and self-supporting in the community.

Case No. 2

This is a woman fifty-two years of age, with no known relatives. She was a patient in a mental deficiency hospital from 1911 until 1952, when she was licensed to a domestic situation. She was fortunate in having a sympathetic employer who helped her considerably.

Initially her work was satisfactory, and she was discharged from Order of the Mental Deficiency Acts in July, 1956.

Soon after securing her discharge her work deteriorated. She became insolent to her employer, picked quarrels with others, and consequently lost her job. New employment as a resident domestic maid was found. An over attachment to another maid (a discharged mental defective) produced a situation which became so complex that the employer asked both girls to leave.

The social worker concerned in the case eventually managed to find separate employment for the two girls. After a period of two months, however, the girl packed her bags and walked out of her job without giving notice. It was found that she had secured an alternative post in which she would again be working with her friend.

She is quite irresponsible in her attitude to employment, being generally unstable and immature, with a limited understanding of everyday problems. She will need a considerable amount of help but unfortunately is reluctant to accept advice. It is doubtful whether she will ever settle down in the community after her long stay in hospital.

Case 1 also serves to illustrate a further problem—that of finding accommodation for patients who return to the community after a long period of hospital care, and who are without relatives or friends who can provide a home. Many hours of patient enquiry have to be spent in searching for suitable lodgings with landladies who are thought likely to appreciate the limitations of the patients, to give encouragement, and to provide a stable environment. When the patient is not in full employment the task is even greater. In such cases hostel accommodation administered by the local health authority would provide a half-way house between hospital and lodgings until the patient became stabilised in the community.

Employment of Mental Defectives

A survey of mental defectives over the age of sixteen years under statutory supervision, friendly supervision and guardianship has been carried out. This shows the position at the end of 1957 to be as follows:

	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Per cent.</i>
Number in employment	203	96	299	39
Number unemployed	69	95	164	21
Number unemployable	142	135	277	36
Number employable but housewives..	—	34	34	4
	<hr/> 436	<hr/> 338	<hr/> 774	
Number considered stable in employment	123	72	195	25
Number attending occupation or industrial centre	66	58	124	16
Number not attending occupation or industrial centre	370	280	650	84
	<hr/> 436	<hr/> 338	<hr/> 774	
Reasons for non-attendance at occupation or industrial centre:—				
Employed	203	96	299	
Married women	—	34	34	
Unwillingness of patient or relative ..	83	85	168	
Unsuitable	84	65	149	
	<hr/> 370	<hr/> 280	<hr/> 650	

Patients are employed in a variety of trades and industries in the City of Bristol, as can be seen from the following analysis:

	<i>Male</i>	<i>Female</i>	<i>Total</i>
Labourers	132	—	132
Van Boy or	13	—	13
Lorry Driver's Mate			
Milk Roundsman			
Coal Haulier	6	—	6
Furniture Removal	2	—	2
Tug/Barge Hand	4	—	4
Market Porter	2	—	2
Hotel Porter	1	—	1
Newsvendor	3	—	3
Gardener	2	—	2
Factory Worker	12	63	75
Road Sweeper	3	—	3
Salvage Worker	4	1	5
Baker's Assistant	2	1	3
Butcher's Assistant	1	—	1
Warehouseman	1	—	1
Boot Repairer	3	—	3
Remploy	2	—	2
Dry Cleaner and/or	—	8	8
Laundry Worker			
Cinema Projectionist	1	—	1
Daily Domestic	—	15	15
Garage Hand	1	—	1
Painter and Decorator	1	—	1
Messenger	1	—	1
Canvassers	—	1	1
Canteen Kitchen Hands	—	6	6
Basket Makers	1	—	1
Dairy Hand	1	—	1
Panel Beater (Apprentice)	1	—	1
Hairdresser (Trainee)	—	1	1
Saw Mill Worker	1	—	1
Bus Cleaner	1	—	1
	<hr/> 203	<hr/> 96	<hr/> 299

Mental Illness

During 1957, the mental welfare officers were called upon to deal with 699 cases of mental illness. Hospital admission was found to be unnecessary in 179 cases. In 57 cases, direct admission to a mental hospital was arranged. The remainder (463) were admitted to the mental observation wards at Manor Park Hospital. The value of the procedure, adopted in Bristol, of admitting patients to an observation ward in the first instance, is shown by the fact that, of the 463 patients dealt with in this way during the year, only 255 needed to be subsequently transferred to a mental hospital or neurosis unit. Of the remaining 208 patients, 99 were fit for discharge to their homes after a short period of observation, 79 were transferred to sick wards, two were placed in the Welfare Services Committee's accommodation, and 28 (all elderly patients) died.

In addition to the cases dealt with by the mental welfare officers, 613 patients entered mental hospitals as voluntary patients, by direct arrangement with consultant psychiatrists.

The number of persons over the age of seventy referred to the mental welfare officers (176), though still high, showed a reduction of 44 in comparison with the figure for 1956. It was found possible to avoid admission to mental hospitals in all but 32 of these cases.

As already mentioned in the introduction to this section of the report, there has again been a fall in the number of cases to whom mental welfare officers have been called. On the other hand, the total admissions to mental hospitals (including those admitted direct to hospital as voluntary patients by consultant psychiatrists) has risen. Any slight easing, therefore, of the pressure on mental hospital beds would appear to be due to a more rapid turnover of patients rather than to any slackening of admissions.

The admissions to mental hospitals for the past three years are as follows:

	<i>Certified</i>	<i>Temporary</i>	<i>Voluntary</i>	<i>Total</i>	<i>Percentage Voluntary</i>
1955 ..	152	25	555	732	76%
1956 ..	209	12	622	843	74%
1957 ..	135	11	777	923	84%

It will be noted that the year has seen a marked fall in certified, and a marked rise in voluntary admissions. This is in accordance with the accepted policy of avoiding formal procedures wherever possible.

Psychiatric After-Care

During the year, contact was maintained with certain ex-service personnel recently discharged from the Forces on psychiatric grounds, in addition to those already on the register who need long-term help. Whenever necessary, the patient was advised to consult his general practitioner and the psychiatric outpatient clinic in order that any necessary treatment could be given without delay. Several patients did, in fact, need in-patient treatment during the year, and after their discharge from hospital the after-care visitor resumed her visits to deal with the more general social problems. The usual practical type of help such as finding suitable work or accommodation was less of a problem than that of dealing with the patients' own personal problems, particularly when hospital treatment was refused and they had to live in the community, causing anxiety to their friends and relatives. Fortunately, many made satisfactory adjustment, and, when they could be left to deal with their own problems, the help of the visitor was withdrawn. By the close of the year, twelve ex-service cases continued to need support.

Persons who pass through the observation ward at Manor Park Hospital are often neither "certifiable" nor willing to receive treatment as voluntary patients. They are, in other words, not suitable for hospital care and yet social problems frequently remained unsolved. Contact was made with thirty such persons, first at the hospital, and then, if the patient agreed, by further visits at home. Innumerable types of problems were brought to light and dealt with, the visitor helping the patient to face his problems realistically.

Seventeen other cases were visited, having been referred by numerous social agencies as being in need of help, advice, or support. Many of these benefited from attendance at Southmead Social Therapy Club, and others were placed in suitable jobs. Some merely needed a friendly visit from time to time.

Social Therapy Club

The Social Therapy Club at Southmead Clinic has been open for two hours each afternoon, Monday to Friday, during the year, and has been well supported by its regular members. In addition, new members have been referred by other social workers and agencies, and many patients have, through the helpful influence of the club, been assisted to tackle their problems constructively. Although the accent of the work is on social readjustment, there has been a high standard of handwork, and this could be seen to full advantage at the sale of work. The voluntary helpers maintained their interest and their help has been invaluable.

The aims and achievements of the Club are reflected in the following case histories:

- A. The home visitor had been working for some time with a girl of twenty-seven years who had not been in employment of any kind since leaving school. This had been due partly to over-protection by her mother and to the girl's complete lack of confidence and rather defeatist attitude towards life, which could be seen in her constant excuses for not seeking work and her hiding behind small illnesses and ailments. Eventually both the mother and daughter accepted the fact that she could work if she wished, but as many years had elapsed since she had mixed normally with others, the social worker felt that she needed some "half-way house" between the seclusion of home and the activity of work, so with this in view she introduced the girl to the club. She attended regularly for the next three months, and despite her statements that she could not grip properly, made several articles well. In the meantime, the social worker had registered her at the employment exchange, and she was accepted for a course of training at the Industrial Rehabilitation Unit. She stayed for the maximum course of twelve weeks, and was a fairly steady worker. At the termination of the course she was placed in unskilled work in a local factory and maintained her job.
- B. The Family Service Unit referred a man of thirty-seven years who had a poor employment record, and had failed in his course at the Industrial Rehabilitation Unit after one month. He had had two short stays in the Neurosis Unit and was inclined to regard himself as a failure. He attended the club for some months and regained some of his self-confidence, benefiting from the cheerful atmosphere. When a vacancy occurred he was able to accept and keep a job as gardener.
- C. A Mental Welfare Officer referred the case of a man of forty years who had been causing some disturbance in his lodgings, and seemed in need of occupation and support through a difficult period. Fortunately at this time he was accepted for the Industrial Rehabilitation Unit, and whilst waiting for a vacancy he attended the club daily. He stayed for the full course at the Industrial Rehabilitation Unit, where he worked in the miscellaneous, woodwork, fitting and machine sections, and although he did not show any capacity for rising above the unskilled level, he worked steadily and at the termination of the course was recommended for factory work and placed in a suitable unskilled job.
- D. The Ministry of Labour referred a man of forty-six years, after he had terminated his course at the Industrial Rehabilitation Unit prematurely on the grounds of inadaptability. His history showed that he had not worked for the last thirty years, as at the age of sixteen, whilst working for a firm of toy makers, he had had some attack which had rendered him (or so he thought) incapable of tackling the job. His parents did not press him to seek other work, and he gradually drifted into a state of seclusion. This was shattered by the death of the parents and the break-up of the family home. The shock of facing reality proved too much and there was an attempt at suicide, followed by a period of treatment in hospital. When first contacted, this man was extremely morose and withdrawn, and without ambition or plans for the future. After some persuasion, he attended the club, where, despite his statements to the contrary, he made several articles well. He mixed with other club members and gradually, during the ensuing months, gained some confidence, although he needed much support when his fears and doubts returned, as they did from time to time. After seven months he felt able to take work, which he has since maintained.

Suicide

During 1957, 41 suicides were reported to the coroner, and 71 attempted suicides to the police. These figures relate only to Bristol residents who committed or attempted suicide in Bristol.

The following table is an analysis of the 1957 cases:

	<i>Suicide</i>		<i>Attempted Suicide</i>		<i>Total</i>		<i>M and F</i>
	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	
Poisoning:—							
Coal Gas	10	11	6	7	16	18	34
Aspirin	—	—	1	1	1	1	2
Narcotic	1	3	1	1	2	4	6
Unspecified "tablets"	1	—	17	9	18	9	27
Liniment	—	—	3	1	3	1	4
Cyanide	—	—	1	—	1	—	1
Disinfectant ..	—	—	1	—	1	—	1
Drowning	—	4	2	2	2	6	8
Cutting throat ..	2	—	5	4	7	4	11
Cutting wrists ..	—	—	1	1	1	1	2
Hanging	2	1	1	—	3	1	4
Jumping from window	—	—	—	2	—	2	2
Jumping from bridge	2	—	1	—	3	—	3
Jumping under train	1	—	—	—	1	—	1
Shooting	2	—	—	—	2	—	2
Stabbing	—	—	—	1	—	1	1
Burning	—	1	—	—	—	1	1
Poker in throat ..	—	—	1	—	1	—	1
Blow on head ..	—	—	1	—	1	—	1
Totals	21	20	42	29	63	49	112

The age incidence was as follows:

<i>Age Group (1957 cases)</i>	<i>Suicide</i>		<i>Attempted</i>	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
Under 20	1	—	3	1
20-29	—	—	7	5
30-39	1	1	8	8
40-49	4	3	8	4
50-59	6	7	4	5
60-69	7	4	6	5
70-79	2	4	2	—
80+	—	1	4	1

Records of suicide and attempted suicide have now been kept for a period of four years, and the following summary is of considerable interest.

All Cases (Suicide and Attempted Suicide) 1954-1957

	<i>Male</i>		<i>Female</i>		<i>Total</i>	<i>Percentage Successful</i>
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>		
Coal Gas Poisoning	89	91	180		73	
Other Poisoning	48	48	96		19	
Cut Throat	17	8	25		32	
Cut Wrists or Arms	4	5	9		0	
Jumping from a height ..	12	8	20		70	
Jumping under train or vehicle	4	2	6		33	
Drowning	7	11	18		33	
Hanging	15	3	18		83	
Strangulation	0	8	8		0	
Other methods	8	2	10		50	
Totals	206	184	390		52.4	49.5
					51	

Coal gas poisoning was the most popular method, accounting for 46 per cent. of all cases. Death resulted in a high proportion of cases (73 per cent.).

With other forms of poisoning, the death rate was much lower (19 per cent.). It is interesting that of 52 cases of poisoning by unspecified "tablets," only one was successful.

Other methods which carried a high mortality were hanging and jumping from a height. Of 18 cases of hanging, 15 died; but of 8 cases of strangulation by other means, all survived.

As regards age, the incidence in the 30-39 age group was nearly double that in the 20-29 group, and remained high throughout the remainder of adult life.

Statistical Tables

(i) Total Mental Defectives known to Local Health Authority at 31st December, 1957

(a) <i>Under Mental Deficiency Acts:</i>					Male	Female	Total
In hospitals and on licence	..	..	..	..	346	337	683
Under guardianship	..	..	..	..	25	16	41
Under statutory supervision	..	..	..	..	514	397	911
Totals	..	..	..	..	885	750	1635
(b) <i>Not under Mental Deficiency Acts:</i>					Male	Female	Total
Pending ascertainment	..	..	..	..	16	14	30
Discharged from order (after-care)	..	..	..	..	53	54	107
Totals	..	..	..	..	69	68	137
All known cases	..	..	..	..	954	818	1772

(ii) Cases referred as Mentally Defective during 1957

(a) <i>Referred by:</i>					Male	Female	Total
Local Education Authority	..	..	..	..	41	33	74
General Medical Practitioners	..	..	..	..	1	2	3
Police Courts	..	..	..	..	2	1	3
Others	..	..	..	..	18	16	34
Totals	..	..	..	..	62	52	114
(b) <i>Disposal:</i>							
Admitted to mental deficiency hospitals	..	..	..	..	5	8	13
Placed under supervision	..	..	..	..	37	24	61
Action not yet taken:							
School leavers	..	..	..	..	8	5	13
Others	..	..	..	..	8	9	17
Action unnecessary:							
Died or left district	..	..	..	..	2	4	6
Found not to be M.D.	..	..	..	..	2	2	4
Totals	..	..	..	..	62	52	114

(iii) Analysis of Mental Defectives in Hospital (including those on licence)

				<i>Male</i>	<i>Female</i>	<i>Total</i>
At 31st December, 1956	..	..	..	340	338	678
<i>Added during 1957:</i>						
From statutory supervision	..	..	..	15	19	34
From guardianship (varying order)	..	..	..	—	1	1
Others	..	..	..	8	8	16
				23	28	51
<i>Method of Admission:</i>						
Section 3, M.D. Act	..	..	..	14	14	28
Section 6, „ „	..	..	..	3	8	11
Section 7(1) „ „	..	..	..	1	3	4
Section 8 „ „	..	..	..	3	—	3
Informal admission	..	..	..	2	3	5
				23	28	51
<i>Removed during 1957</i>						
Discharged by authority of Board of Control				12	12	24
Discharged by operation of law	..	..	..	3	5	8
Transferred to guardianship (varying order)	..	..	..	—	1	1
Died	..	..	..	4	9	13
				19	27	46
Totals	..	..	..	19	27	46
Remaining at 31st December, 1957	..	..	..	344	339	683

(iv) Analysis of Mental Defectives under Guardianship

				<i>Male</i>	<i>Female</i>	<i>Total</i>
At 31st December, 1956	..	..	..	24	16	40
<i>Added during 1957:</i>						
From hospital (varying order)	..	..	..	—	1	1
From supervision	..	..	..	1	—	1
				1	1	2
<i>Removed during 1957:</i>						
Transferred to hospital (varying order)	..	..	..	—	1	1
				—	1	1
Remaining at 31st December, 1957	..	..	..	25	16	41

(v) Analysis of Mental Defectives under Statutory Supervision

				<i>Male</i>	<i>Female</i>	<i>Total</i>
At 31st December, 1956	..	..	..	539	423	962
Added during 1957	..	..	..	50	37	87
<i>Removed during 1957:</i>						
Discharged from supervision	..	..	..	29	24	53
Admitted to mental deficiency hospitals	..	..	..	16	19	35
Transferred to guardianship	..	..	..	1	—	1
Left district	..	..	..	22	15	37
Died	..	..	..	7	5	12
Totals	..	..	..	75	63	138
Remaining at 31st December, 1957	..	..	..	514	397	911

(vi) Mental Illness: Bristol Patients in Mental Hospitals at 31st December, 1957

				<i>Male</i>	<i>Female</i>	<i>Total</i>
Certified patients	..	..	..	344	516	860
Voluntary patients	..	..	..	264	332	596
Temporary patients	..	..	..	2	1	3
Totals	..	..	..	610	849	1459
In Dundry Villas Neurosis Unit	..	..	..	36	25	61

(vii) Persons receiving Psychiatric After-Care from Local Health Authority at 31st December, 1957

				<i>Male</i>	<i>Female</i>	<i>Total</i>
Ex-service patients	..	..	..	12	—	12
Ex-mental hospitals	..	..	..	18	12	30
Others	..	..	..	6	11	17
Totals	..	..	..	36	23	59

(viii) Mental Illness: Cases dealt with by Mental Welfare Officers during 1957

A. Removed to Observation Ward under Section 20 of Lunacy Act, 1890:—

	Under 20		20-29		30-39		40-49		50-59		60-69		70-79		80 and over		All Ages	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Transferred to Bristol mental hospitals as certified patients	-	-	8	2	11	13	9	12	5	10	1	14	4	5	-	1	38	57
Transferred to other mental hospitals as certified patients	-	-	-	-	4	-	1	2	1	3	-	-	-	-	-	6	5	11
Transferred to Bristol mental hospitals as voluntary patients	3	1	5	1	11	18	10	16	8	17	11	13	8	7	3	59	73	132
Transferred to other mental hospitals as voluntary patients	1	-	1	-	2	1	1	-	-	1	-	-	-	-	-	6	1	7
Transferred to Bristol mental hospitals as temporary patients	-	-	-	-	1	-	2	2	-	1	-	1	-	1	-	-	3	5
Transferred to Dundry Villas Neurosis Unit	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	2

Provided with care other than under Lunacy and Mental Treatment Acts:

Discharged home	2	1	9	1	10	8	10	8	6	9	9	10	7	6	2	1	55	44
Transferred to sick wards	-	1	-	-	-	-	2	2	3	2	7	9	6	28	5	16	22	57
Referred to Welfare Services Department	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	1	2
Died before further action taken	-	-	-	-	-	-	-	-	-	-	3	2	10	4	3	6	16	12
Total number of Section 20 cases	6	2	24	4	39	40	33	42	23	44	33	49	35	51	14	24	207	256

B. NOT dealt with under Section 20 of Lunacy Act, 1890:

Certified direct admissions to mental hospitals	-	-	-	1	2	3	3	2	-	4	1	2	-	-	1	-	7	12
Voluntary direct admissions to mental hospitals	-	-	-	1	3	3	6	1	1	5	-	4	-	1	-	-	10	15
Temporary direct admissions to mental hospitals	-	-	-	-	-	-	-	-	-	2	-	-	1	-	-	-	1	2
Urgency Orders (subsequently certified)	-	-	1	2	-	1	-	3	1	2	-	-	-	-	-	-	2	8
Provided with care other than under Lunacy and Mental Treatment Acts	1	1	5	9	15	18	15	15	10	11	14	16	10	18	5	16	75	104
Total number of cases not under Section 20	1	1	6	13	20	25	24	21	12	24	15	22	11	19	6	16	95	141
TOTAL cases dealt with (A. and B.)	7	3	30	17	59	65	57	61	35	68	48	71	46	70	20	40	302	397

Admissions to Mental Hospitals			
Certified	..	..	53
Voluntary	..	..	82
Temporary	..	..	135
Total	..	132	178

PREVENTION OF ILLNESS, CARE, AND AFTER-CARE

TUBERCULOSIS

Dr. A. M. McFarlan
(*Epidemiologist*)

In 1957 the work for the prevention and after-care of tuberculosis continued along the lines of previous years.

The indices of the success or otherwise of the preventive measures in which therapy plays an important role were satisfactory. Deaths due to the disease were lower than in the previous year, with 31 due to pulmonary tuberculosis (37 in 1956) and 5 due to non-pulmonary tuberculosis (6 in 1956). New notifications were slightly less (301 pulmonary and 36 non-pulmonary compared with 304 and 48 respectively). The percentage of positive reactions to the tuberculin test in 13-year-old school children whose parents consented to the test before B.C.G. vaccination was 10·9 as compared with 13·7 in the previous year. These figures show that more remains to be done before tuberculosis is really under control and the number of new cases becomes negligible.

Investigation of the home contacts of cases is arranged by the tuberculosis visitors and they frequently succeed in securing the attendance of all the immediate household contacts and of relations and friends in other parts of the city. There are some refusals, but persistence is at times rewarded. The importance of the examination is shown by some recent cases where the disease has been found in people who failed to attend some years ago when a case was found in the family.

The Mass Radiography Service took 50,516 miniature chest X-rays in Bristol during 1957. Among these, 128 cases of active tuberculosis were found and 147 persons were kept under observation. The sessions for patients referred by their doctors continue to be well patronised and to discover a high percentage of new cases of tuberculosis.

An attempt to carry out a more intensive survey of some areas in the city was not as successful as was hoped. Despite talks to local groups and house-to-house visiting by volunteers with a distribution of leaflets and exhibition of posters, the response was small. It is possible that more publicity and a closer link-up of visiting with the actual time of the sessions would be more productive. The help of volunteers was much appreciated and in addition to a few cases of tuberculosis brought to light there was a spread of valuable education about the disease in Hartcliffe and Southmead.

The protection of susceptibles by B.C.G. was continued among contacts, where 1,029 persons were vaccinated—296 infants in Southmead Hospital and 733 at the Chest Clinic. These figures are similar to those in 1956. In 13-year-old school children there was a drop in acceptances by parents from 3,803 to 3,187. The number of children vaccinated was 2,841 as compared with 3,279 in the previous year. The fall in the percentage of positive reactors to 10·9 from 13·7 shows that more children in this age group are in need of protection, and it is important that the co-operation of teachers should continue to get as many acceptances as possible.

For the care and after-care of patients and their families, the Voluntary Care Committee provides assistance in cash and kind where statutory sources of help are not available.

The close link-up of the consultant chest physicians at the Chest Clinic with the tuberculosis visitors and the welfare officers ensures that all available help is given to patients and their families.

The Care and After-care of Patients and their families

Mr. C. L. Bryant, the Executive Officer of the Tuberculosis Service, is also Honorary Secretary of the Bristol Tuberculosis Voluntary Care Committee. This arrangement and the close co-operation of the welfare officers with other Corporation departments and national organisations serve to ensure that patients and their families receive all the assistance available to them.

During 1957 application forms were issued to 344 patients for allowances payable to certain cases of pulmonary tuberculosis by the National Assistance Board.

Under the Council's scheme, free milk, usually two pints a day, was granted to an average of 355 patients a day on medical recommendation and subject to an income limit.

Housing conditions in 150 families were such that support was given to an application for rehousing and 101 families were rehoused.

Other sources of help include the Ministry of Pensions and National Insurance for sickness benefit and disability pensions, the Bristol District Nursing Association for home nursing, the Council's Home Help Service for domestic help, and the Children's Officer for boarding out children.

These sources do not meet all the needs discovered by the chest physicians, welfare officers and tuberculosis visitors. During 1957 the Tuberculosis Voluntary Care Committee made 320 grants of clothing, footwear, bedding, or cash. The Committee also continued to hold occupational therapy classes and their occupational therapist made 628 home visits to patients who were unfit to attend the classes.

Most patients can return to normal employment after treatment. Those who cannot do so are advised to register with the Ministry of Labour under the Disabled Persons (Employment) Act. The Disablement Resettlement Officers of the Ministry then place them directly into suitable employment, or after a time at an Industrial Rehabilitation Unit, or possibly at a Government Training Centre. The Special Remploi Factory at Southmead provided sheltered employment under medical supervision for an average of 65 men and women during 1957.

The Voluntary Care Committee provided suitable employment for 13 ex-patients at kiosks for the sale of tobacco, cigarettes, stationery, confectionery, etc., in hospitals.

The foregoing briefly indicates the variety of activities undertaken by the Council in co-operation with the hospital services, the Tuberculosis Voluntary Care Committee, and other bodies, so as to ensure proper care of the tuberculous patient from the day of diagnosis. This care takes its place as a preventive measure alongside the others which are applied to members of his family and to the community at large. None of them should be relaxed, since all contribute to the effort to eradicate tuberculosis.

VENEREAL DISEASES

A high incidence of venereal disease always accompanies unstable social conditions. Hence a considerable decline in incidence was to be expected in the immediate post-war years.

It would be erroneous to conclude, however, that the incidence will continue to decline if measures to ensure early investigation and treatment are relaxed.

There is no evidence to suggest that these diseases will be eradicated in the foreseeable future; indeed the incidence of gonorrhoea has increased appreciably in England and Wales since 1954. Fortunately the incidence in the Bristol area has not followed the pattern for England and Wales as a whole.

**Table 1—Number of Cases of Gonorrhea referred to Clinic
1954 - 1957**

			<i>Bristol Clinics</i>	
			<i>England and Wales</i>	<i>All Cases</i>
				<i>Bristol Residents</i>
1954	..	..	17,511	227
1955	..	..	17,681	281
1956	..	..	20,310	249
1957	..	..	24,352	257

The increased incidence of gonorrhoea in the country may be partly explained by the pattern of immigration since 1953-54. The proportion of immigrants in the Bristol population is less than that in other great ports and cities of the country, and this may explain why the curve of incidence in the Bristol area has not followed that for the country as a whole.

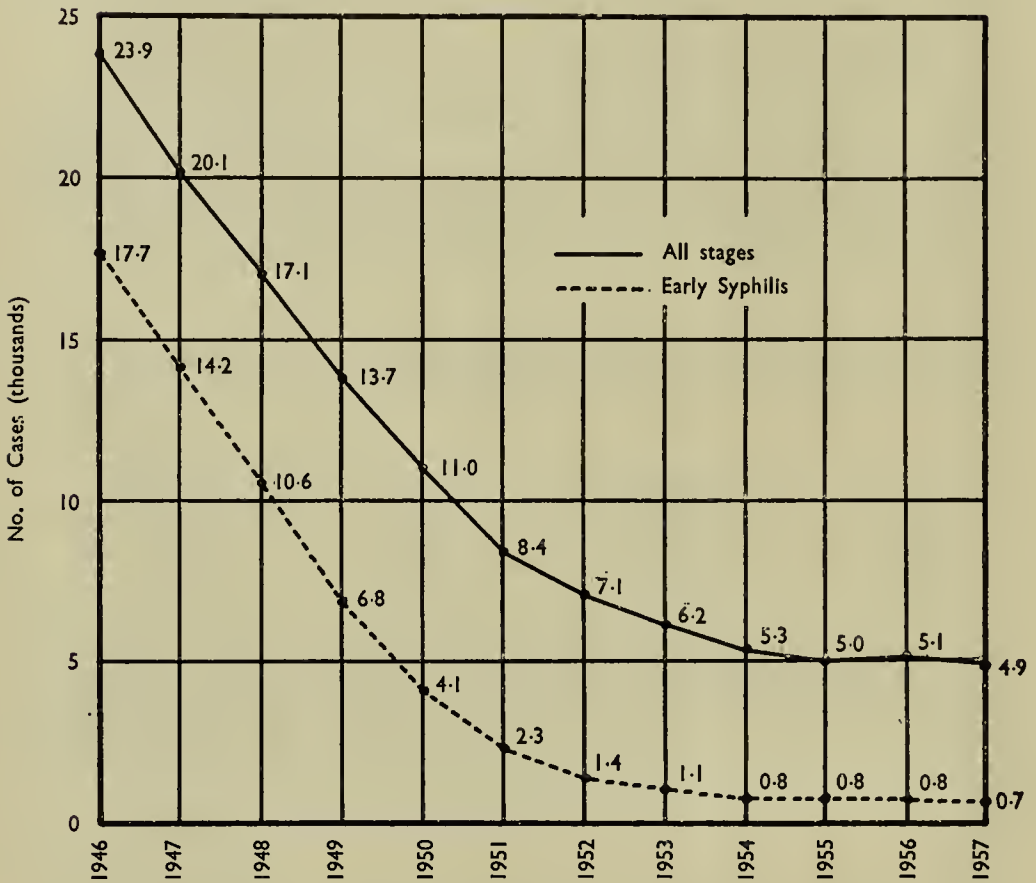
Syphilis

Since 1953, the incidence of syphilis (all stages) has not continued to decline at the same rate as for the preceding post-war years (Table 2).

From this epidemiological point of view the incidence of early syphilis is of greater importance than that for all stages of the disease. The remarkable decline in the number of patients referred to clinics in England and Wales with early syphilis (i.e. infection of less than one year's duration) is recorded in graphic form overleaf. It will be seen that the incidence of early syphilis has remained at a very low, but fairly constant, level for the past few years.

The majority of these cases occur in the great ports of the country, and in this respect it is of interest to note that approximately half of all such cases seen in clinics of the Bristol area occur among seamen who report in the first instance at the V.D. clinic at Avonmouth docks.

Number of Cases of Syphilis referred to Clinics in England
and Wales, 1946 - 1957



The number of Bristol cases of (a) early syphilis and (b) late syphilis referred to the clinics in the Bristol area is low, but has remained very constant for the past few years (Table 2).

Table 2—Syphilis Analysis of New Registrations (Bristol cases)
1948 - 1957

		Early Syphilis			Late Syphilis		
		Male	Female	Total	Male	Female	Total
1948	..	54	43	97	32	14	46
1949	..	48	17	65	39	23	62
1950	..	17	10	27	31	42	73
1951	..	17	4	21	26	21	47
1952	..	18	5	23	36	20	56
1953	..	12	2	14	16	19	35
1954	..	6	1	7	18	16	34
1955	..	6	2	8	12	14	26
1956	..	7	6	13	16	18	34
1957	..	9	5	14	17	21	38

Congenital Syphilis

One of the most gratifying results of the campaign to prevent the spread of venereal disease is the virtual disappearance of infantile congenital syphilis. The number of cases under the age of one year, recorded in the clinics of England and Wales, has fallen from 363 in 1946 to 30 in 1957. For the second year in succession no deaths of infants under one year have been reported as being due to this disease.

This is a very significant contribution to the public health and is due to excellent co-operation between the ante-natal and venereal disease services which exists in this country.

In 1957, 252 ante-natal cases were referred from the Central Health Clinic to the Special Diagnostic Clinic. From these, nine cases of late maternal syphilis, in Bristol residents, were discovered and treated, thus preventing possibly nine cases of infantile congenital syphilis.

Eight cases of congenital syphilis (5 males, 3 females), all over the age of 1 year, were referred to the Bristol clinics in 1957. The corresponding figure for England and Wales as a whole was 533. These figures represent a failure in previous years to discover and treat cases of acquired syphilis in that number of expectant mothers.

The complete eradication of this disease will depend on the continued co-operation between the ante-natal and venereal disease services for some years to come.

Other Conditions

The following were the total new registrations (i.e. Bristol residents and others) at Bristol clinics during 1957:

	<i>Male</i>	<i>Female</i>	<i>Total</i>
Chancroid	24	—	24
Non-Specific Urethritis ..	205	—	205
Other	718	590	1,308

Miss G. Stinchcombe, the Medical Social Worker, reports as follows:

During the year, out of a total registration of 1,264 male and 441 female patients at the clinic, only 277 males and 105 females needed treatment for venereal disease. Assuming that most of the V.D. patients living in the City do in fact obtain their treatment at the clinic, this represents a rate of less than 1 per 1,000 of the population.

The importance of V.D. social work lies not only in helping actual cases, but also those who, having risked exposure to infection, fortunately did not need treatment. The non-venereal cases often need a far greater amount of advice and investigation than the straightforward case of venereal infection. One result of many years' sustained efforts in unobtrusively educating the general public to an awareness of the implications of venereal disease, is their willingness to come freely to the Special Treatment Centres for help and advice.

Contact tracing has again proved very successful. Out of a total of 62 notifications concerning 53 female contacts, 33 were traced, whilst 16 male contacts out of a total of 38 were traced. This aspect of social work—perhaps the most difficult—calls for a maximum amount of tact and diplomacy without which success would be negligible.

Default Control statistics reveal an ultimate refusal rate of 6·7 per cent. males and 14·6 per cent. females, which shows a considerable measure of success in the follow up of defaulting patients.

Rehabilitation has continued to be effective in many cases and financial support from the V.D. Voluntary Care Committee has enabled assistance to be given in a number of necessitous cases.

Lectures and talks given throughout the year to various professional and other bodies provided valuable opportunities for educational work.

The following figures indicate the statistical result of the year's work:

	<i>Males</i>			<i>Females</i>		
	<i>Bristol</i>	<i>Other Areas</i>	<i>Total</i>	<i>Bristol</i>	<i>Other Areas</i>	<i>Total</i>
Total number of Registrations during 1957	1,131	133	1,264	363	78	441
New Cases persuaded by Social Worker to attend	17	2	19	80	7	87
New cases admitted through other agencies	1,114	131	1,245	283	71	354
Number of cases appearing on Social Worker's Register during the year	1,131	133	1,264	363	78	441
Social Worker's attendances at clinics	446	—	446	379	—	379
New cases interviewed in clinics	501	59	560	218	54	272
Current cases interviewed in clinics	1,100	62	1,162	556	139	695
In-patients interviewed in wards	233	43	276	219	66	285
Contact tracing visits	38	—	38	172	—	172
Default visits	309	—	309	354	—	354
Blank visits (a) New cases	19	—	19	35	—	35
(b) Default	116	—	116	53	—	53
Number of letters sent						
(a) New cases	3	—	3	19	—	19
(b) Defaulters	240	—	240	250	—	250
(c) Others	102	—	102	160	—	160
Total visits, including those for other purposes	653	—	653	973	—	973

	<i>Infections</i>	<i>N.V.D.</i>	<i>Total</i>
Male Diagnoses	277	987	1,264
Female Diagnoses	105	336	441

Default Control — 1957

	<i>Males</i>	<i>Females</i>
No. of patients registered in 1957 defaulting	76	53
No. of other patients defaulting	152	156
	228	209
No. of actual defaults involved	284	278
No. of patients who returned for treatment	204	187
No. of patients who did not return	24	22

Disposal of Balance:

Transferred to other clinics outside Bristol area	3	6
Refused to attend again	11	6
No trace	—	3
Died	4	—
Carried forward to 1958	6	7
	24	22

THE AMBULANCE SERVICE

The following report has been submitted by Mr. R. F. F. Wood, Chief Ambulance Officer:

"Please send immediately, my wife is having a baby . . ."

"There is a bad road accident at . . ."

"Please send analgesia apparatus to . . ."

"I have six stretcher cases for you to be discharged from hospital and six more to come in—all urgent . . ."

"There has been an accident at . . ."

"I have a number of sitting cases ready to return home after treatment."

"My mother is ill at home—I can't get my doctor on the 'phone—can you help?"

"Please send another ambulance to assist in road crash . . ."

"My child has just scalded herself—please send at once."

"What has happened to the ambulance I ordered five minutes ago."

. . . and so on, throughout the day, each day, every day, averaging between 500 and 600 cases each day. Such is the pressure under which a modern Ambulance Service has to work and this takes no account of vehicle breakdowns, repairs or staff sickness. It is difficult, indeed almost impossible, for anyone not in the service to appreciate fully the magnitude of the task which faces ambulance services throughout the country. It is this aspect—education—which has been given prominence during 1957.

During 1957 an attempt has been made to inform the public of the working of the service with a view to securing even more economical and effective use of it.

To this end talks on the Ambulance Service have been given to members of voluntary organisations, medical students and student nurses, schools, health visitors, and student midwives. This has been followed in the majority of cases by a visit to the Ambulance Control Room to enable people to see exactly how messages are received and dealt with by the Service.

Toward the end of the year, members of the Ambulance Sub-Committee met representatives of the teaching hospital group to discuss mutual problems relating to the Ambulance Service. Arising out of this meeting, arrangements were made for an experimental sub-control to be established at the main hospital with an officer of the Ambulance Service in charge. This officer would deal with all Ambulance Service transport in and out of the hospital during the day period. By this means it is hoped to conserve the use of vehicles, effecting a quicker turn round, and to reduce the pressure on the main Control Room Staff.

It is never an easy task for any County Borough Service to make really efficient arrangements to ensure that the fullest possible use is made on the return journey of vehicles coming in to the City from County areas. Relationships with our immediate neighbours, Somerset and Gloucestershire, have been of the highest order and by means of close consultation we have been most successful in saving time, money and the "paper work" which inevitably arises out of all cases covered by Section 24 of the Amendment Act.

Where rail travel has been used for long distance cases we have again been most fortunate in the assistance so readily given by the staff of the British Railways, and the invaluable help of members of the Red Cross and St. John organisations in providing escorts for the patients.

In the comparatively few instances where insistence has been placed on the patient travelling all the way by road, it has been our policy to inform the receiving Authority of this fact. In many instances where Section 24 is applicable they have sent their own vehicles to Bristol thereby effecting a saving in cost, or have given notification of a vehicle already scheduled to come to Bristol. The discharge of the patient from the hospital has in the main been re-arranged to make full use of such a vehicle on the return journey. Where this has not been possible and the patient has been able to travel by car, full use has been made of the Hospital Car Service organised by the W.V.S., and we are indebted to them for their help on these occasions, often at very short notice. Mention must also be made of another experiment which has undoubtedly proved its worth, namely the establishment of a direct telephone link between the Bristol Ambulance Control Room and the Group Control Officer for North Somerset, situated at Weston-super-Mare. By this means immediate contact is made, to enable both services to deal quickly and efficiently with emergencies in near areas of the County for which the Bristol Ambulance Service is responsible on an agency basis. It also ensures that notification is always made of vehicles proceeding to Bristol which may be used on the return run. The installation was approved by both authorities and agreement reached to share the cost.

During the year five new ambulances and one sitting-case vehicle were purchased. One vehicle has a fibre-glass body and panelled interior. The fibre-glass body panels are colour impregnated so that re-painting should not be necessary in the future, and it is hoped that the ravages of rust may be avoided.

The Committee have approved the purchase of five of the latest type of automatic resuscitation sets (the British Oxygen Minuteman), but they had not been delivered by the end of the year.

The difficulties of combining the needs of a peacetime Ambulance Service with the requirements of the Civil Defence Ambulance and Casualty Collecting Section, were alleviated to a certain extent by the appointment in July of a training officer for the C.D. Section. This appointment and details of Civil Defence activities will be dealt with under the Report on Civil Defence. The members of the peacetime service have been encouraged to participate in field exercises, and permission has been obtained to run a training school for a period of nine weeks in the early part of 1958.

A representative team was entered for the competition organised by the National Association of Ambulance Officers and took part in the Regional Contest at Truro on June 22nd. The team was placed third in the competition and the team captain, Driver K. Croker, was successful in winning the cup presented annually to the team captain obtaining the highest marks in this section of the contest.

The Agency agreement with the Avonmouth Docks Ambulance Committee worked well throughout the year and in addition to the normal work inside the Dock area, response was made to thirty-four emergency calls in the Avonmouth village area.

Although it is pleasing to record a reduction in the number of patients carried throughout the year, a saving in mileage of 18,941 miles and a decrease in the miles per patient figure it does not follow that there is a mood of complacency. On the contrary, every endeavour is being made to effect still further economies and at the same time improve the efficiency of the Ambulance Service. The main hope in this direction lies in the provision of a central station which will house all the personnel and vehicles under one roof. To this end it is hoped that 1958 will lead to a settlement of the planning which is essential

for a project of this nature and thereby enable all concerned with the working of the service to go ahead with renewed hope and vigour.

In conclusion I would like to thank Mr. H. M. Ellis, Cleansing and Transport Officer for his ready help and co-operation in the purchase and maintenance of vehicles.

Total Number of Cases

Month	<i>Bristol Ambulance Service</i>			<i>Supplementary Services</i>		<i>Grand Total</i>
	<i>Stretcher</i>	<i>Sitting</i>	<i>Total</i>	<i>Taxis</i>	<i>H.C.S.</i>	
January ..	3,744	9,338	13,082	22	45	13,149
February ..	3,153	8,006	11,159	26	18	11,203
March ..	3,537	9,190	12,727	18	29	12,774
April ..	3,718	8,848	12,566	54	25	12,645
May ..	4,057	10,281	14,338	82	24	14,444
June ..	3,520	9,025	12,545	52	50	12,647
July ..	4,085	10,410	14,495	30	77	14,602
August ..	3,586	8,537	12,123	18	38	12,179
September ..	3,370	8,695	12,065	47	46	12,158
October ..	3,735	8,719	12,454	75	73	12,602
November ..	3,430	8,296	11,726	57	96	11,879
December ..	3,534	7,527	11,061	45	67	11,173
	<u>43,469</u>	<u>106,872</u>	<u>150,341</u>	<u>526</u>	<u>588</u>	<u>151,455</u>

Summary of all cases dealt with by Ambulance and Supplementary Services

	<i>Ambulance Service</i>		<i>Hosp. Car Service</i>		<i>Rail Journeys</i>
	<i>Taxis</i>	<i>Total</i>	<i>Total</i>		
1957 ..	150,341	526	588	151,455	140
1956 ..	152,386	536	36	153,228	144
	<u>—2,045</u>	<u>—10</u>	<u>+552</u>	<u>—1,773</u>	<u>—4</u>

Ambulance Service—Types of Cases

	<i>Accidents</i>	<i>Maternity</i>	<i>Infectious</i>	<i>General</i>	<i>Total</i>
1957 ..	7,161	3,011	1,036	139,133	150,341
1956 ..	6,788	3,486	1,123	140,989	152,386
	<u>+373</u>	<u>—475</u>	<u>—87</u>	<u>—1,856</u>	<u>—2,045</u>

Mileage

<i>Month</i>		<i>Ambulance Service</i>	<i>H.C.S.</i>	<i>Taxis</i>	<i>Total</i>
January	..	68,863	72	429	69,364
February	..	60,223	184	235	60,642
March	..	66,530	110	263	66,903
April	..	65,187	742	318	66,247
May	..	70,976	389	430	71,795
June	..	62,055	288	615	62,958
July	..	70,709	221	1,132	72,062
August	..	62,302	95	839	63,236
September	..	61,335	279	545	62,159
October	..	65,474	448	678	66,600
November	..	59,630	346	1,229	61,205
December	..	58,386	718	330	59,444
		<u>771,670</u>	<u>3,902</u>	<u>7,043</u>	<u>782,615</u>

Mileage 1956 .. 801,556
 1957 .. 782,615

Reduction .. 18,941

Miles per patient. 1957 .. 5·17
 1956 .. 5·23

Reduction of ·06 miles per patient.

ENVIRONMENTAL HEALTH, HOUSING AND INSPECTION OF FOOD

F. J. Redstone, F.R.S.H., F.A.P.H.I.

(Chief Public Health Inspector)

<i>Deputy Chief Public Health Inspector</i>	..	G. J. Creech
<i>Senior Housing Inspector</i>	.. ..	C. E. Bowden
<i>Senior Food Inspector</i>	.. .. .	P. Hayter
<i>Senior Port Health Inspector</i>	.. ..	E. I. Davies
<i>Senior Meat Inspector</i>	.. .. .	A. L. Mawditt
<i>Senior District Inspector (Special duty: Atmospheric Pollution)</i>	.. ..	G. Hopper
<i>Senior District Inspector (Special duty: Technical Training and Environmental Health Education</i>	.. .. .	G. L. Whone

ENVIRONMENTAL HEALTH SERVICES

In these days time passes so quickly that the task of preparing an Annual Report appears to arrive more frequently than ever before. The pace at which we live today reflects itself in the greater demands now received for improvement in those matters which directly affect the people's health, and standards once tolerated in connection with housing accommodation, food distribution, and the condition of the atmosphere, are no longer acceptable without complaint.

The continuous move forward in these matters is, without any doubt, in the best interests of public health and the overall picture must give a great measure of satisfaction to the Bristol Health Committee, which has always been so insistent on the maintenance and improvement of environmental health conditions in this City.

Throughout the year priority was given to the inspection of houses represented by the Medical Officer of Health under Clearance Area Schemes and as will be seen in the housing section of this report much additional work concerned with the repair of houses was performed. The drive towards cleaner food handling was maintained and, although results in this important aspect of public health work are not always quickly apparent, the persistence of the clean food campaign is beginning to have effect in that more food is now protected from contamination in food shops and stores by the use of wrappings, refrigerators, and closed-in food shop windows. Much remains to be done but the general public's response to more hygienic methods is of great assistance to health authorities in these matters.

At long last one is able to record a considerable public interest in our work towards cleaning the air we breathe. The passing of the Clean Air Act has given a tremendous fillip towards the adoption of cleaner methods of heating, and this is seen in both industrial and domestic premises. During the year the Health Committee considered the formation of a smoke control area, and survey work to this end was proceeding as the year closed.

Meat and food inspection is one of the prime duties of the Health Department and it is pleasing to record that once again a hundred per cent inspection of all carcasses and organs of animals slaughtered in the City was carried out.

This opening statement would be incomplete if it lacked reference to the wholehearted manner in which all the staff—both inspectorial and clerical—have carried out their duties with keenness and enthusiasm throughout the year. This applies also to the trainee public health inspectors, who appreciate their opportunities and are of much assistance in the general work of the section.

Examination Successes during the year by Officers of the Division

The following further qualifications were obtained by officers of the Division during the year:

The Royal Society for the Promotion of Health: Certificate for Inspector of Meat and Other Foods—

D. King, G. A. Manners, B. A. Mills, A. D. Soloman.

The Royal Society for the Promotion of Health: Certificate for Smoke Inspectors—

A. R. Hutt.

Local Government Examination Board: Clerical Division Examination—

A. E. Dyer, D. M. Moon, E. N. Stinchcombe.

Repairs to Property in Owner's Default

At the beginning of the year under review 29 cases were outstanding from the previous year.

During 1957, 40 cases were referred to the Defaults Section for consideration, making a total of 69 properties dealt with thus:

45 properties were repaired by the Corporation's contractor; 5 properties were repaired by their respective owners after the cases had been referred to Defaults Section; 10 cases were not proceeded with for various reasons.

At the end of 1957, 9 cases only were still outstanding; 5 properties were being repaired by the Corporation's contractor; 4 cases were pending.

During the year, 39 orders were issued to various Corporation's contractors and accounts totalling £1,604 1s. 8d. were passed.

This year shows a slight decrease in the number of cases referred to the Defaults Section. However, an increase in the actual work carried out and the accounts passed, show a decided rise. It follows that the number of cases outstanding at the end of the year is much lower.

Works by Agreement under Section 275 of the Public Health Act, 1936

At the beginning of the year, one case of "works by agreement" was in the hands of the Defaults Section.

During 1957, 2 further cases were referred to the Defaults Section for consideration, and these three properties were repaired by the Corporation's contractor; 3 orders were issued and accounts totalling £309 9s. 10d. passed.

General Remarks

Whilst the number of cases referred to the Defaults Section was slightly less than the previous year, the amount of work carried out was considerably more as can be seen from the accounts passed. In many cases complex problems have had to be dealt with involving considerable consultations with the Town Clerk.

Public Health Inspections—Sanitation, Housing, Shops Acts, etc.

1956				1957			
Visits	Re-visits	Total		Visits	Re-visits	Total	
—	—	3,983	Complaints	—	—	3,510	
4,833	17,152	21,985	Visits:	4,721	13,414	18,135	
—	—	—	Dwelling houses	—	—	—	
2	8	10	Houses let in lodgings	13	2	15	
4	7	11	Common lodging houses	3	7	10	
98	149	247	Food shops—Registerable	105	66	171	
660	1,416	2,076	Not registerable	780	1,823	2,603	
223	517	740	Other shops	249	444	693	
52	66	118	Bakehouses	80	108	188	
118	251	369	Workplaces and offices	218	345	563	
41	131	172	Factories—Non-mechanical	44	78	122	
336	532	868	Mechanical	224	362	586	
99	49	148	Outworkers	51	19	70	
20	38	58	Removal of aged persons	14	25	39	
134	893	1,027	Smoke observations	226	933	1,159	
—	—	—	Clean Air Act	247	26	273	
16	28	44	Offensive trades	10	32	42	
29	149	178	Entertainment places	42	211	253	
46	259	305	Tents, vans and sheds	35	141	176	
67	97	164	Keeping of animals	168	122	190	
374	266	640	Food inspection	465	173	640	
348	279	627	Sites	178	182	360	
58	146	204	Institutions, hospitals, etc.	70	157	227	
509	633	1,142	All other matters	1,037	921	1,958	

1956				1957			
In-tima- tion	Statu- tory	Compliance I	S	In-tima- tion	Statu- tory	Compliance I	S
696	968	331	308	Notices:—			
—	—	—	—	Dwelling houses (P.H.)	575	640	268
—	—	—	—	Houses let in lodgings	—	—	—
4	—	1	—	Common lodging houses	1	—	—
77	—	44	2	Food shops—Registerable	14	—	5
26	—	22	—	Non-registerable	131	1	145
2	—	1	—	Other shops	33	3	38
5	—	5	—	Bakehouses	13	—	8
6	—	6	2	Workplaces and offices	4	—	6
19	—	22	1	Factories—Non-mechanical	2	—	—
—	—	—	—	Mechanical	32	—	27
—	—	—	—	Outworkers	—	—	—
—	—	—	—	Removal of aged persons	—	—	—
—	—	—	—	Smoke observations	3	2	3
—	—	—	—	Offensive trades	—	—	—
—	—	2	—	Entertainment places	—	—	1
—	—	—	—	Tents, vans and sheds	1	—	—
—	—	—	—	Keeping of animals	2	—	1
—	—	—	—	All other matters	2	—	3

Sanitation, Housing, Shops Acts, etc.—Remedial Action

1956		1957
	Drainage Works:—	
29	New drains laid	85
579	Drains repaired	594
1,130	Choked drains cleared	1,079
177	Tests made	156
	Sanitary Conveniences:—	
12	Flushing appliances introduced	14
8	Additional closets fitted	4
7	Separate closets for sexes provided	1
81	New pans fitted	56
1	Action <i>re</i> bathroom and geyser vent	5
5	Urinals	6
196	Other works	183
18	Intervening ventilated space provided	12
—	Cesspools abolished	24
	Water Supplies:—	
8	New and additional installations	11
20	Hot water installed	120
1	Wells closed	1
	Other Sanitary Fittings:—	
20	New sinks fitted	26
5	Additional sinks provided	7
21	Wash basins provided	107
	Other Works:—	
401	Roofs repaired	319
283	Dampness remedied	258
1,245	Other new and repair works	1,987
4	Yards paved and drained	15
18	Houses cleansed—Dirty	20
89	Verminous	112
20	Food store installed—cooking facilities improved	1
33	Lighting improved	56
10	Ventilation improved	23
3	Meal rooms provided	1
1	Heating provided	24
14	Exhumations	—
2	Overcrowding—abated	—
	Keeping of Animals:—	
—	Removal of manure	1
—	Provision of manure receptacles	—
—	Drainage provided	—
	Aged and Infirm Persons:—	
3	Removals—Voluntary	3
1	Court Order	—
	Smoke Observations:—	
14	Infringements—dealt with	21
	Noise Nuisances:—	
3	Dealt with	9
	Other Nuisances:—	
606	Dealt with	493
	Food Hygiene Regulations, 1955:—	
59	Miscellaneous Requirements	401

FACTORIES ACTS, 1937 AND 1948

Inspections of Factories

<i>Premises</i> (1)	<i>Number on Register</i> (3)	<i>Inspections</i> (4)	<i>Number of Written Notices</i> (5)	<i>Occupiers Prosecuted</i> (6)
(i) Factories in which sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	188	122	—	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	1,112	586	28	—
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding outworkers' premises)	161	563	6	—
Total	1,461	1,271	34	—

Cases in which defects were found

<i>Particulars</i> (1)	<i>No. of cases in which defects were:—</i>				<i>No. of cases in which prosecutions were instituted</i> (7)
	<i>Found</i> (3)	<i>Remedied</i> (4)	<i>Referred to H.M. Inspector</i> (5)	<i>Found by H.M. Inspector</i> (6)	
Want of cleanliness (S.1) ..	1	4	—	—	—
Overcrowding (S.2)	—	—	—	—	—
Unreasonable temperature (S.3)	—	1	—	—	—
Inadequate ventilation (S.4) ..	2	3	—	4	—
Ineffective drainage of floors (S.6)	—	—	—	—	—
Sanitary Conveniences (S.7):—					
(a) Insufficient	2	7	—	2	—
(b) Unsuitable or defective ..	18	22	—	11	—
(c) Not separate for sexes ..	—	—	—	—	—
Other offences against the Acts (not including offences relating to Outwork)	1	1	—	—	—
Other works	6	6	—	—	—
Total	30	44	—	17	—

List of Outworkers received during 1957

<i>Description of Homework</i>		<i>No. of Outworkers</i>	
		<i>February</i>	<i>August</i>
Wearing apparel		23	18
Shoes		1	1
Artificial jewellery		—	—
Gloves		18	13
Others		2	1
Total		44	33

HOUSING

Housing Act, 1957

During the year the *Housing Act, 1957*, came into force and was described as an Act to consolidate the law relating to housing. Such an amending Act was long overdue, for housing legislation had become very unwieldy.

Comment can be made on two points of interest:

- (a) Section 157 *Housing Act, 1957*, deals with official representations and substantially re-enacts Section 154 *Housing Act, 1936*. Subsection 2 of this latter Section deals specifically with the action which the Medical Officer of Health must take when complaint is made by a Justice of the Peace or four local government electors. Subsection 2 of Section 157 *Housing Act, 1957*, however, omits reference to the collective right of four local government electors to complain.
- (b) Early in 1957 whilst the consolidation of housing legislation was under consideration, two decisions of the Court of Appeal respecting underground rooms had the effect of rendering null and void the underground room regulations which had always been looked upon as an added means for controlling the special problems of lighting, ventilation and dampness normally associated with such rooms. The decisions in effect were that the standard of fitness laid down in Section 9 *Housing Repairs and Rents Act, 1954* (now Section 4 *Housing Act, 1957*) superseded the Underground Room Regulations.

It was noted that the Housing Bill, 1957 (Section 8) re-enacted Section 12 *Housing Act, 1936*, yet when the Bill became the *Housing Act, 1957*, after the Court of Appeal decisions, certain words had been added to Section 8 which had the effect of reinstating the power of Local Authorities to make Regulations.

Slum Clearance Programme

For a slum clearance programme to be realistic and effective as far as the health of the people is concerned, speed is essential. If the clearance of the slums is spread over too long a period of time then it ceases to be an effective programme. With this sense of urgency in mind the Council decided in 1955-56 on a policy of demolishing 10,000 unfit houses in five years; a policy which became all the more urgent when the payment of government subsidies on new houses was restricted to those provided for families displaced by slum clearance.

The following table shows progress during 1955, 1956, and 1957 towards the total of 10,000 houses. Some 3,713 houses have so far been dealt with:

			1955 from 5th May	1956	1957
Houses in Clearance Areas and already covered by operative Clearance Orders or Compulsory Purchase Orders.	Pre war	138	26	11	28
	Post war up to 5.5.55	73 } 211	—	65	3
Houses already in Clearance Areas and for which Clearance Orders or Compulsory Purchase Orders have been submitted to the Minister, but have not yet become operative.	Post war up to 5.5.55	56	—	18	6
Number of houses subject to operative Demolition Orders	Pre war and post war up to 5.5.55	238	—	—	115
Total demolished			26	94	152
Houses represented—Clearance Areas	.. ..		537	1215	1191
Demolition Orders made	.. ..		44	32	21
Certificates of Unfitness—Houses owned by Corporation	.. ..		—	51	189
Undertakings given by owners to demolish	.. ..		—	14	14
Unfit Houses voluntarily demolished by Corporation and others	.. ..		—	97	36
Grand Totals			607	1503	1603

The Ministry's Inspector, accompanied by a Public Health Inspector, visits houses represented for clearance in the course of one of a number of public inquiries held in Bristol during the year.

Clearance Area Procedure

Year	Clearance Areas		Orders made							Orders confirmed						
	Rep.	Houses	C.O.	Pinks	C.P.O.	Pinks	Grey	Other	Sites	C.O.	Pinks	C.P.O.	Pinks	Grey	Others	Sites
1953	2	33	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1954	22	112	11	76	4	17	5	—	1	3	45	1	5	—	—	—
1955	48	537	15	118	13	250	135	11	50	14	57	6	30	12	—	5
1956	107	1215	17	75	26	378	63	11	75	16	107	20	314	93	10	44
1957	111	1191	78	832	6	226	84	34	79	13	73	14	267	28	5	41

A brief study of the above table will show that the tempo of clearance area work set in 1956 was maintained. Whereas in 1955 and 1956, however, the number of properties included in Compulsory Purchase Orders exceeded those in Clearance Orders, in 1957 the position was reversed—a direct result of restriction on capital expenditure, particularly as respects the purchase of land zoned in the Development Plan for industrial development. The Council did, however, maintain their policy of making Compulsory Purchase Orders on houses where it was considered that the sites could be advantageously redeveloped for housing purposes.

Some very important and interesting public inquiries were held during the year. Apart from the public inquiries themselves much intensive and detailed

work was put in by the housing inspectors on the preparation of evidence and schedules of principal grounds.

These public inquiries brought out two points about which comment can usefully be made. These concerned "standards of fitness" and definition of "house."

Section 9 of the *Housing Repairs and Rent Act, 1954*, now consolidated under the *Housing Act, 1957*, laid down a new standard of fitness and it was realised at the outset that, insofar as the so-called "standard" was but a list of matters to which regard must be had, the decision as to the "fitness" of a house for human habitation was a personal judgment. As between the extremes of very good and very bad there lies a mass of houses where unfitness is but a matter of degree. The question is "where should the line be drawn?" That objectors have realised this "point of vulnerability" is beyond doubt, for with increasing frequency the point is being made—"the unfitness of the house is a question of personal opinion." In such circumstances it is for the Minister to decide.

Many appeals during the past year have been on the ground that "premises have been wrongly included in Clearance Areas because they were not houses." Frequently such premises have been wholly used for other purposes for long periods, and degrees of internal alteration have been carried out. It is not easy to decide when premises cease to be "houses," but inspection of them must be very thorough and case law kept constantly in mind.

Rent Act, 1957

The *Rent Act*, insofar as it deals with controlled houses, is a very complicated measure and ample evidence is already available that its provisions are not readily understood by tenants. Although the Act has only been in force for six months it is possible to list some general impressions.

1. That as few as 5 per cent of Form G's received are correctly filled in.
2. That the majority of Form G's enumerate the work to be done and not the defects to be remedied.
3. That reference in Note 19 of the sixth schedule of the *Rent Restriction Regulations, 1957*, to such matters as loose slates or tiles, broken window panes, and sash cords, has created the impression among landlords and tenants that only minor defects of repair can be listed.
4. That the general term "Clearance Area" used in Section 2 (1) (c) of the *Rent Act* has created in the minds of tenants the impression that unfit houses likely to be dealt with by Clearance Area procedure in the future cannot have their rent increased.
5. The lack of knowledge of building terms has led tenants to use a wide variety of general terms, the meaning and implication of which cannot be easily interpreted.
6. Tenants are including on Form G items of internal decorative repair for which the landlord is not responsible on the ground that the decorations are bad because of the landlord's failure to fulfil his responsibility respecting repairs.
7. The inclusion of the "age, character and locality" provision which Local Authorities have to apply is having the effect of limiting the amount of work done, notwithstanding the fact that the maximum increase in rent is charged.
8. That by placing the onus of defining what repairs are necessary on the tenant, houses of the same rateable value, and, therefore, of similar rent, are not being brought up to the same standard of repair.

*First Schedule**Period covered by return: 6th July, 1957, to 31st December, 1957.**Part I—Applications for Certificates of Disrepair*

Number of applications for certificates—213.

Number of decisions not to issue certificates—Nil.

Number of decisions to issue certificates—

(a) in respect of some but not all defects—117.

(b) in respect of all defects—87.

Number of undertakings given by landlords under paragraph 5 of the First Schedule—54.

Number of undertakings refused by Local Authority under proviso to paragraph 5 of the First Schedule—Nil.

Number of certificates issued—114.

Part II—Applications for Cancellation of Certificates

Applications by landlords to Local Authority for cancellation of certificates—12.

Objections by tenants to cancellation of certificates—3.

Decisions by Local Authority to cancel in spite of tenants' objection—Nil.

Certificates cancelled by Local Authority—2.

Housing and Sanitation

1956		1957
	Houses Inspected:—	
—	Section 9	—
119	Section 16	102
1,530	Clearance Area	1,275
9,840	Visits for improvement grants, estimated life and other matters	13,112
	Represented to Committee:—	
—	Section 9	—
119	Section 16	102
1,215	Clearance Area	1,191
	Orders made:—	
32	Demolition Order—(Section 17, <i>Housing Act</i> , 1957) ..	21
52	Closing Orders—Whole house (Section 17, <i>Housing Act</i> , 1957)	45
2	Closing Orders—Whole house (Section 17, SS. 3, <i>Housing Act</i> , 1957)	1
24	Closing Order—Underground rooms and parts of buildings (Section 18, <i>Housing Act</i> , 1957)	26
3	Undertakings to repair accepted (Section 16, <i>Housing Act</i> , 1957)	1
10	Undertakings not to use (Section 16, <i>Housing Act</i> , 1957)	10
—	Undertakings to demolish (Section 3, 3a and Section 11, <i>Housing Subsidies Act</i> , 1956)	22
	Houses Repaired:—	
—	Section 9—informal	—
—	Section 9—formal	—
—	Section 9—formal by Corporation in default	—
2	Undertakings to repair	1
2	Undertakings not to use, cancelled after repair	3
—	Other repairs	1
14	Closing Orders determined after repair	13
—	Demolition Order cancelled (Section 11 <i>Housing Act</i> , 1936)	1
18	Certificates of Disrepair	120
4	Revocation of Certificates of Disrepair	2
—	Refusal of Certificates of Disrepair	—

INSPECTION OF MEAT AND OTHER FOODS

Slaughtering Facilities

The facilities provided at the Public Abattoir were adequate to deal with the throughput experienced there and these facilities coupled with those at Hotwells Lairs slaughterhouse, which is occupied and administered by the Mutual Meat Traders Limited, were found to be sufficient for the needs of butchers operating in the City. There was a slight reduction in the number of animals slaughtered during 1957 (121,194 against 122,978 in 1956). This is due principally to the reduced number of pigs killed in the bacon factories. The number of cows killed rose a little during the year and this is mainly the reason for the increase of 0.10 per cent in the total percentage of cows found to be affected with tuberculosis. Dealing with the better class of animal, steers and heifers, the reverse is the case as the percentage of animals affected with tuberculosis shows a slight but welcome reduction of 0.20 per cent.

Very few animals were slaughtered at Hotwells Lairs for export, but this may have been due to an increase in the number of live animals exported. At one time this traffic was considerable in other parts of the country until the Exported Cattle Protection Order, 1957, came into operation. Although Bristol has no "approved premises," as defined in the Order, some selection of animals for export did take place in Hotwells Lairs prior to being removed to "approved premises" before export to France. Fairly regular loads of carcass meat were sent from Hotwells Lairs to Smithfield and Birmingham for resale in the markets there.

Slaughterhouses

Pig slaughtering at the Public Abattoir, Gordon Road, has in the past necessitated considerable manual labour by slaughtermen over a tank of scalding water in order to remove the hair from pig carcasses. This hot, exhausting work has now been largely eliminated at the Abattoir by the installation of a de-hairing machine.

This machine is used in conjunction with a scalding tank, but only the minimum of preparatory work in the tank is necessary. When the pig carcass has been sufficiently soaked in the scalding water a hydraulically powered cradle lifts it from the tank and lowers it on to the revolving beater shaft of the machine. The impression given at this stage is that the pig carcass would be torn to shreds but this is not the case, and after being bounced around for a minute or so all the hair is efficiently removed from all but the most inaccessible parts of the carcass, leaving it clean and unmarked. Another lift (hydraulic) is then brought into operation and the carcass is effortlessly removed from the machine on to a table, where the final stages of hair removal are carried out prior to the next stage in the dressing operation.

The hygienic routine in connection with floors, knives, wiping cloths and other equipment started at the Public Abattoir some two years ago still continues to be very successful and these methods are being increasingly used at the Hotwells slaughterhouse.

The recently completed Chill Rooms at the Public Abattoir, Gordon Road, Whitehall, again gave excellent service and all users of the Abattoir were pleased with the condition of the meat when removed.

The Mutual Meat Traders at Hotwells slaughterhouse converted their existing offal space into a prepacking room, and considerable work was carried out to bring it up to modern standards including the installation of a refrigerator for storing the meat both before and after packing. Female staff are employed to pack the meat and offal into suitable trays which are then covered with a



Members of the Health Committee, accompanied by the Chief Public Health Inspector, examine a pig carcass at the Corporation's abattoir after it has been passed through the de-hairing machine.

(Photograph by "*Western Daily Press*")



The Ministry's Inspector accompanied by a Public Health Inspector visits houses represented for clearance in the course of one of a number of public enquiries held in Bristol during the year.

(Photograph by "*Western Daily Press*")



A B.E.N. Lister, petrol driven compressor which allows one or two atomiser units to be operated. The machine is stationed outside a building and, with the aid of extension leads, permits external or internal treatment to be carried out.

(Photograph by "Evening World")



A Lister petrol driven compressor disinfector used normally where a heavy spray is required. Tips, areas of waste land and large buildings can be effectively treated with this machine.

(Photograph by "Evening World")

thin sheet of plastic material which is sealed by the application of heat from a small electric iron. One of the large stores in the City and others outside are at present being supplied with prepacked meat from this source.

Meat Inspection

Full time meat inspectors have been on duty at both large slaughterhouses during the year maintaining a hundred per cent inspection of all carcasses and organs of animals slaughtered there. Full use has been made of the trainee inspectors on duty at each slaughterhouse and the records kept have proved to be valuable.

The detection and cold storage of beef carcasses found to be affected with *cysticercosis* have again shown an increase. This position which is fairly general throughout the country is shortly to be investigated by the Ministry of Agriculture, Fisheries and Food at certain selected centres of which Bristol may be one.

Sunday slaughter has again been a feature at both slaughterhouses resulting in long and awkward hours being worked by the meat inspectors to maintain an efficient meat inspection service.

Bacon Factories

The slaughter of pigs for the bacon trade still shows a downward trend. This year only 17,916 pigs were slaughtered as against 28,030 in 1955 and all areas adjoining Bristol appear to be experiencing a similar reduction in the number of pigs killed.

One firm has again spent considerable sums of money on the improvement of their premises, and the provision of female staff rooms and lavatory accommodation was completed. In addition new cold storage accommodation is being provided and further works are contemplated for the coming year. Conditions at the other three bacon factories are fairly good considering that the work is carried on in old premises which do not lend themselves to extensive alterations.

Meat Depots

The Old Market Street area is still a hive of industry for the meat trade and regular early morning visits are made to these depots to check all classes and grades of meat and offal received there for resale. A fair amount of English meat which is slaughtered outside the City is sold at these depots, but very little trouble has been experienced with these meat supplies as full co-operation has been achieved with the various firms operating in this area.

Large quantities of chilled and frozen meat and offal are handled at these depots and one firm who also operate from a large Cold Store, opened a new depot at Old Market Street in July 1957. A freezing chamber is incorporated in this new depot for storing frozen lamb, sheep and beef carcasses and offal for the wholesale trade. The premises are of first class construction, well planned and satisfactorily maintained. Another firm had their depot improved by moving the office accommodation to a newly constructed first floor and former office accommodation is to be eventually converted into a freezing chamber. All other depots have been maintained in a satisfactory manner and the managements have co-operated fully with the department. Complaint was levelled at one depot about the condition of meat humpers' overalls, but this was dealt with and the improvement was maintained.

The Mutual Meat Traders opened a depot at a large cold store for handling their imported frozen carcasses of meat and offal. Their West Street depot re-introduced Scottish beef into the city for the first time since 1939. The

quality of this meat has always been good and it is transported in a satisfactory manner. Fairly regular consignments of Irish beef and lambs are also received here with very little trouble to date and although criticism was made against a haulier for the lack of protective clothing of drivers this matter was soon rectified.

Several consignments of imported lamb and mutton carcasses were received into the City via the cold stores and meat depots for reconditioning and approximately 800 carcasses were dealt with and sold to the trade for retail sale in the usual way. Most of the carcasses were part of a consignment from the refrigerated holds of ships which had been involved in an accident.

Canteens

Frequent visits were made to kitchens of the school meals service in order to check the quality of meat supplied. Large quantities of meat are dealt with at these kitchens during the course of the year and occasionally a complaint is received but very little criticism can be levelled at the canteen staffs or the trade for the way the meat is handled.

Meat Transport

Taken on the whole, local butchers and meat transporters are doing a good job of conveying carcase meat and offal in a reasonably hygienic manner, but prosecutions under the Food Hygiene Regulations, 1955, have been instituted in a few cases with varying results. It would appear that premises exempted under the Regulations are legally considered to include unsatisfactory transport found on the exempted premises. This anomaly and other matters resulted in representations being made to the Association of Municipal Corporations with a view to amending the legislation.

Knackers Yards

Two firms only have licenced knackers yards in the City and, although their premises are very old, reasonable conditions exist in both cases. Very few animals are slaughtered on these premises as most of the animals are slaughtered on farms in and around the City.

Legislation

New legislation which came into operation during the year includes the following:

1. *The Exported Cattle Protection Order, 1957.*

This Order gives the Minister power to see that all cattle exported by sea or air receive suitable treatment.

2. *The Live Poultry (Restrictions) Order, 1957*

This Order allows for the control of movement of poultry at poultry shows and the licensing of poultry sales, etc.

3. *The Diseases of Animals (Waste Foods) Order, 1957*

Transfers the power to license certain classes of piggeries from the Minister to the Local Authority.

Draft Legislation

Draft Regulations were issued on the Construction of Slaughterhouses. These draft regulations aim at controlling the construction, layout and equipment of slaughterhouses, the lairaging, handling, and slaughter of animals in a humane manner, the hygienic handling of carcasses and offals, efficient meat inspection facilities, and working and welfare conditions for those employed in slaughterhouses.

Draft Slaughterhouses Bill:—The provisions in the new Slaughterhouses Bill are intended to amend the licensing of slaughterhouses and the *Slaughter of Animals Act*, and introduce regulations for the safety and health of workers in slaughterhouses and knackers yards.

Inspection of Piggeries

During 1956 a survey was started by the district inspectors to ascertain the number of piggeries in the City. The Diseases of Animals (Waste Foods) Order, 1957, which transferred from the Ministry to Local Authorities the licensing of piggeries boiling certain classes of waste food came into operation on the 1st June, 1957. When this Order became operative a detailed inspection of the piggeries was commenced and the results obtained so far show the need for careful consideration of each piggery including those already licensed by the Minister. An appropriate inspection sheet was drawn up which incorporated space for a site plan. This enabled the situation of sties, boiling plant and distances from adjoining properties to be recorded, and, as will be seen from the following table, many of the piggeries require action to be taken in connection with the boiling plant as well as the piggery itself. The Allotments Committee submitted plans for improving the whole area of one group of their small holdings, and the suggested improvements include the provision of main drainage, water supply, and suitably equipped structures for housing boilers and provision for storing the boiled and unboiled pig food. About 160 visits were made to the City piggeries and this figure includes interviews with prospective occupiers of small holdings owned by the Local Authority.

Number of known piggeries	..	..	..	..	..	..	71
Number of piggeries inspected	..	..	..	..	..	..	41
Number of piggeries licensed by the Ministry	..	..	..	..	..	..	27
Number of piggeries satisfactory	..	..	..	..	..	..	16
Number of piggeries requiring alteration to:—							
(a) Plant only	..	..	..	..	..	..	1
(b) Premises only	..	..	..	..	..	..	4
(c) Plant and premises	..	..	..	..	..	..	20
						—	41
Number of piggeries requiring a licence	..	..	..	..	..	..	13
Number of licensed piggeries with plant not suitably housed	..	..	..	..	..	..	12

Cold Stores

Regular visits are made to the cold stores in the City. Cold stores are exempt from the provisions of the Food Hygiene Regulations, but with the co-operation of the managements reasonable standards were maintained. Work is in progress on one of the cold stores to increase the number of chambers and improve the lift arrangements and another is being provided with a new deep-freeze chamber.

Legal Proceedings

Five prosecutions for contravention of the Food Hygiene Regulations were taken before the Magistrates during the year with the following results:

Contravention of Regulation 29 1 (b) and 8 (a)	..	..	Firm fined £5 on each count with 3 guineas advocates fee.
Contravention of Regulation 29 1 (b)	..	..	Not proven.
Contravention of Regulation 8 (a)	..	..	Not proven. No costs allowed against the Local Authority.
Contravention of Regulation 29 1 (b)	..	..	Not proven. No costs allowed against the Local Authority.
Contravention of Regulation 29 1 (b) and 10	..	..	Firm fined £5 and £10 respectively with 2 guineas advocates fee.

Inspection of Meat and Other Foods

1956							1957
<i>Visits:</i>							
1,481	Slaughterhouses and bacon factories	..	..				1,379
53	Butchers' shops	..	..	..	..	..	56
2,824	Fish shops	..	..	..	..	..	2,872
206	Food preparing premises	..	..	..	..	..	186
1,047	Meat markets	..	..	..	..	..	1,174
—	Street traders	..	..	..	..	..	—
140	Schools/Institutions	..	..	..	..	..	273
174	Cold stores	..	..	..	..	..	238
608	Other premises	..	..	..	..	..	125
—	Keeping of Animals	..	..	..	..	..	71
<i>Remedial action:</i>							
5	Slaughterhouses cleansed	..	..	..	..	..	—
1	Slaughterhouses rebuilt, repaired or altered					..	—
—	Sanitary defects, etc.	..	..	..	..	..	—

Fish and Canned Foods Condemned

<i>Fish</i>					<i>Other Foods</i>			
	<i>Tons</i>	<i>cwt.</i>	<i>qrs.</i>	<i>lb.</i>	<i>Tons</i>	<i>cwt.</i>	<i>qrs.</i>	<i>lb.</i>
1956	.. 6	5	2	5	44	17	—	21
1957	.. 7	—	—	26	57	19	3	5

Meat Inspection—Animals Examined

<i>1956</i>					<i>1957</i>			
<i>Hotwells</i>	<i>Bacon</i>				<i>Hotwells</i>	<i>Bacon</i>		
<i>Lairs</i>	<i>Abattoir</i>	<i>Factories</i>	<i>Total</i>		<i>Lairs</i>	<i>Abattoir</i>	<i>Factories</i>	<i>Total</i>
		<i>and City</i>					<i>and City</i>	
6,356	11,158	—	17,514	Beasts	7,031	10,607	—	17,638
2,012	4,472	—	6,484	Calves	1,161	3,226	—	4,387
32,777	17,704	—	50,481	Sheep	31,786	20,304	—	52,090
13,071	14,839	20,589	48,499	Pigs	15,978	13,198	17,916	47,092
—	—	—	—	Goats	—	—	—	—
54,216	48,173	20,589	122,978		55,956	47,335	17,916	121,207

Total Weight of Meat Condemned

<i>1956</i>					<i>1957</i>			
	<i>Tons</i>	<i>cwt.</i>	<i>qrs.</i>	<i>lb.</i>	<i>Tons</i>	<i>cwt.</i>	<i>qrs.</i>	<i>lb.</i>
Hotwells Lairs	.. .. 52	0	2	20	53	12	0	10
Abattoir	.. .. 102	16	0	3	88	14	2	11
Bacon Factories	.. .. 12	1	0	1	15	0	3	26
Butchers shops and City	.. .. 10	0	0	12	7	9	0	12
TOTAL	.. .. 176	17	3	8	164	16	3	3

Inspection of Meat and Other Foods

1956 Tons	<i>Meat destroyed from:—</i>				1957 Tons
74·09	Slaughterhouses and Shops	..	..	..	76·19
102·80	Abattoir	..	..	..	88·73
—	Cold Stores	..	..	..	—
51·91	Fish, poultry, vegetables, etc.	..	..	..	65·00

Carcases and Offal Inspected and Condemned in Whole or in Part

	<i>Cattle excluding Cows</i>	<i>Cows</i>	<i>Calves</i>	<i>Sheep and Lambs</i>	<i>Pigs</i>	<i>Horses</i>
Number killed (if known) ..	12,417	5,221	4,383	52,092	47,081	—
Number inspected	12,417	5,221	4,383	52,092	47,081	—
<i>All diseases except tuberculosis and Cysticercosis:—</i>						
Whole carcases condemned	21	24	20	78	218	—
Carcases of which some part or organ was condemned	4,149	2,777	19	3,677	3,792	—
Percentage of the number inspected affected with disease other than tuberculosis and <i>Cysticercosis</i> ..	32·91	53·02	0·435	7·06	8·05	—
<i>Tuberculosis only:—</i>						
Whole carcases condemned	56	74	1	—	58	—
Carcases of which some part or organ was condemned	639	746	1	—	1,541	—
Percentage of the number inspected affected with tuberculosis	5·14	14·29	0·222	—	3·27	—
<i>Cysticercosis:—</i>						
Carcases of which some part or organ was condemned	—	—	—	—	—	—
Carcases submitted to treatment by refrigeration ..	9	53	—	—	—	—
Generalised and totally condemned	—	—	—	—	—	—

Carcases Condemned

	Hotwells Lairs				Abattoir				Bacon Factories/City				Totals			
	T.B.		Other		T.B.		Other		T.B.		Other		T.B.		Other	
	1956	1957	1956	1957	1956	1957	1956	1957	1956	1957	1956	1957	1956	1957	1956	1957
Cows	16	21	8	8	63	53	25	16	—	—	—	—	79	74	33	24
Part Carcases	19	26	7	4	8	15	1	5	—	—	—	—	27	41	8	9
Other	23	17	6	7	50	39	24	14	—	—	—	—	73	56	30	21
Bovines	21	23	19	10	7	7	3	4	—	—	—	—	28	30	22	14
Calves	2	1	6	6	—	—	13	14	—	—	—	—	2	1	19	20
Part carcasses	—	—	1	—	—	—	—	1	—	—	—	—	—	—	1	1
Sheep	—	—	131	57	—	—	25	20	—	—	—	—	—	—	156	77
Part carcasses	—	—	27	18	—	—	—	—	—	—	—	—	—	—	27	18
Pigs	12	17	80	93	27	23	57	94	22	18	37	31	61	58	174	218
Part carcasses	2	1	34	36	6	8	17	12	6	7	28	25	14	16	79	73
Totals	53	56	231	171	140	115	144	158	22	18	37	31	215	189	412	360
Part carcasses	42	50	88	68	21	30	21	22	6	7	28	25	69	87	137	115
Weight in lb.	24113	22425	18142	18160	17685	55498	34926	25960	4573	3014	7213	4623	99371	80937	60281	48743
Part carcasses	6661	8930	3961	3042	2309	3807	1128	1873	240	155	539	608	9210	12892	5629	5523

Schedule of Whole Carcases and Parts Condemned indicating Disease or Condition

<i>Disease</i>	<i>Cows</i>		<i>Steers and Heifers</i>		<i>Calves</i>		<i>Sheep</i>		<i>Pigs</i>	
	<i>Car- case</i>	<i>Part Car- case</i>	<i>Car- case</i>	<i>Part Car- case</i>	<i>Car- case</i>	<i>Part Car- case</i>	<i>Car- case</i>	<i>Part Car- case</i>	<i>Car- case</i>	<i>Part Car- case</i>
Abscess	—	—	—	3	—	—	12	7	16	24
Anaemia	—	—	1	—	—	—	—	—	—	—
Arthritis	—	1	—	—	—	—	1	7	1	2
Blood Splashing ..	—	—	—	—	—	—	—	—	1	—
Bruising	—	3	1	5	—	—	1	1	—	6
Corynebacterium ..	—	—	—	—	—	—	—	—	4	22
Emaciation	2	—	2	—	—	—	13	—	1	—
Fevered	—	—	1	—	1	—	3	—	8	—
Fibrosis	—	—	—	1	—	—	—	—	—	—
Immature	—	—	—	—	9	—	—	—	2	—
Jaundice	—	—	—	—	7	—	—	—	1	—
Johnes	2	—	—	—	—	—	—	—	—	—
Malignant neoplasms ..	—	—	—	—	—	—	—	—	4	—
Mastitis	3	—	—	—	—	—	—	—	—	—
Metritis Septic	—	—	1	—	—	—	—	—	1	—
Moribund	—	—	—	—	—	—	16	—	8	—
Oedema	3	—	2	—	—	—	16	—	13	—
Osteomyelitis	—	—	—	—	—	—	—	—	1	—
Pericarditis	—	—	1	—	—	—	—	—	4	—
Peritonitis	—	1	1	—	—	—	—	—	12	3
Pleurisy	2	2	1	2	—	—	7	3	25	5
Peritonitis and Pleurisy acute	1	1	8	3	—	—	—	—	53	9
Pneumonia	—	—	—	—	—	—	—	—	29	1
Pyæmia	2	—	—	—	2	1	—	—	3	—
Septicaemia	4	—	2	—	1	—	6	—	18	1
Swine erysipelas ..	—	—	—	—	—	—	—	—	9	—
Swine Fever	—	—	—	—	—	—	—	—	3	—
Uraemia	5	1	—	—	—	—	2	—	1	—
TOTAL	24	9	21	14	20	1	77	18	218	73
Tuberculosis	74	41	56	30	1	—	—	—	58	16
GRAND TOTAL ..	98	50	77	44	21	1	77	18	276	89

Animals affected with *Cysticercus Bovis*:—

Cows	9
Steers and heifers	53
TOTAL	62

MILK AND FOOD INSPECTION

Legislation

The amount of new legislation enforceable by Local and Food and Drug Authorities of recent years shows signs of a recession. The principal items of note coming into operation during the year were:

The Colouring Matter in Food Regulations, 1957

Operative, with certain exceptions, from 30th June, 1957.

Under the Preservatives in Food Regulations, the use of specified colouring matters in food for sale for human consumption was prohibited. With the advent of new materials, this prohibition was inadequate and these Regulations revise the process by allowing the use of "permitted" colourings only. Certain foods must not contain added colouring matter except for the purpose of marking, viz. oranges with country of origin.

The sale or the advertisement of any but permitted colouring matters for use in human food is also prohibited and properly labelled containers must be used for them.

The Food Hygiene (Amendment) Regulations, 1957

These regulations, operative from 31st December, 1957, prohibit a person giving out, "for reward", food for preparation for human consumption on domestic premises other than his own.

Until 1st June, 1958, the peeling of shrimps, prawns or onions as "outwork" is permissible. After that date premises used for such work may only be used if they are registered under the *Food and Drugs Act, 1955*, and provided certain hygiene provisions of the principal Regulations are observed.

Notice of intention to employ outworkers for these purposes must be given to the Local Authority by the owner of a food business, and he is also under an obligation to satisfy himself, within the previous three months that compliance with Food Hygiene Regulations is assured.

Matters of Special Interest

Dyed Potatoes

A complaint was received from the purchaser of a sack of potatoes from an itinerant salesman of unknown address. The potatoes were found to be dyed and many were decayed. Investigation revealed that potatoes purchased from growers by the Potato Marketing Board were dyed and sold by the Board as animal food. Some of these were finding their way to dealers and hawkers, who were selling them at handsome profits.

The decayed potatoes complained of were seized and condemned by a magistrate but a prosecution for the sale of unsound food was not possible owing to weakness of evidence. The sale of dyed potatoes as human food was reported to the Potato Marketing Board.

Two further complaints of dyed potatoes were referred to the Board.

Ice Cream

A purchaser reported the discovery of a large black object embedded in a "family" block of ice cream. It resembled a piece of coiled rubber-covered electric wire, but, upon extraction it was found to be a circular rubber ring, 2½" in diameter and ¼" thick. The manufacturers were very

perturbed and investigations at the factory showed it to be a rubber sealing ring from a joint in a processing pipe line normally used in such a position that it could not have reached the freezing stage of the ice cream. Their conclusion was that this was a deliberate act.

Vinegar

A repulsive looking object was found in a prepacked bottle of vinegar. It was of gelatinous consistency, $2\frac{1}{2}$ " long, the diameter of the bottle neck and yellowish in colour. The Public Analyst reported it as "Mother of Vinegar" produced by *bacillus xylinum* acting upon the cellulose in the vinegar and forming a plug in the neck of the bottle, but quite harmless.

The manufacturers stated that their vinegar is pasteured and they discovered that the trouble was due to infection arising from a defective closure, the bottle being faulty. Steps were taken to reject these bottles.

Pickle Tank

At considerable expense, a large firm in the City replaced old wooden pickle tanks by some made of stainless steel.

Brazing a leaky seam left a black stain and appeared to have damaged the "stainless" property of the metal and it was suspected that chemical action between pickle and metal in that state may contaminate meat.

The constructing engineers were contacted on this point and gave their opinion that there would be no adverse effect. Samples of pickle from the new tanks have revealed no metallic contamination.

Laverbread

Samples of an edible seaweed called "laverbread" were bacteriologically unsatisfactory after exposure in fish shops. Repeat samples were therefore secured, upon delivery, of the commodity and of the linen bags in which it was transported from another part of the country. These samples and the bags were reported as showing profuse growths of organisms including presumptive faecal coli but no pathogens.

The Medical Officer of Health of the area producing this material, is investigating an improved method of packing.

It is noted that the Deputy Head of the Windscale Research and Development Laboratories, speaking in London recently, is reported in the press as saying that, "Even if radioactive effluent is discharged far out to sea and diluted down to the permitted levels, both seaweed and silt can concentrate it again." He added, "For some reason, our Welsh friends eat a concoction of seaweed . . . we have to look after them. It would perhaps be easier to get them not to eat laverbread!"

Fertilisers

The Ministry of Agriculture, Fisheries and Food invited the Fertiliser Manufacturers' Association in collaboration with the National Farmers' Union to investigate the working of Regulations made under the Fertilisers and Feeding Stuffs Act.

In consequence the Health Committee was requested to secure a series of special samples at specified works, by arrangement with the managements. This sampling is in progress and will continue until March 1958.

Misleading Descriptions

In spite of considerable legislation dealing with food, efforts to sell goods under descriptions that, to say the least, are of doubtful veracity, continue to be made. The practice is generally harmless but often misleading.

"Butter" sweets

Sweets are called "butter" this or that. There is no legal standard and they frequently contain little if any butterfat. Where they contain some, successful legal action is precluded.

Bread and "butter"

The "butter" in bread and butter sold in cafés and restaurants is often margarine with a small proportion of butter.

"Fruit" slices

Some "fruit" slices with excellent pictorial designs on the packets are sugared jelly, found to include vegetable fibres possibly emanating from fruit flavouring material but no identifiable fruit. It is possible that the fibres originate from fruit pulp, thus again prosecution is not advisable.

Food "miniatures"

With the approach of Christmas a number of packeted food "miniatures" appeared on the market. Small bottles with labels were exact replicas of well-known brands of spirits and wines, including declaration of spirit proofage. Labelled cartons were copies of other food commodities. The contents were in fact syrup or sweets. Manufacturers had attached them to cards carrying a statement as to the nature of the contents, but shopkeepers detached the cards and had failed to substitute some other form of description.

The Town Clerk agreed that exposure and sale under these circumstances constituted offences against the labelling and descriptive provisions of the *Food and Drugs Act* and of the *Merchandise Marks Acts*, and this had been pointed out to the retailers concerned and to the makers.

"Beer" bottles

Another form of trading upon the popularity of something already well known was the sale of "beer" bottles made of chocolate, having reproductions (or possible originals) of labels of nationally known beer and stout.

As these were obviously made of chocolate no action on the question of labelling was considered necessary. In neither case was the question of infringement of copyright in the labels a matter for this department.

"Cream" confectionery

In the few cases where confectionery was displayed with the word "Cream" in some form, analysis of samples proved it not to be cream within the definition of the *Food and Drugs Act*. Letters to shopkeepers secured amendment. It seems now to be the practice to omit any reference to such articles unless they contain genuine cream, in which case care is taken to draw customers' attention to the fact.

"Vinegar"

There have been fewer cases of selling a synthetic product as vinegar.

Legal Proceedings

<i>Offence</i>	<i>Result</i>
Razor blade in confectionery	Fined £15 plus costs.
Nail in black pudding ..	Case against respondent dismissed.
	Manufacturers fined £2 plus costs.
Chitterling unsound	Case dismissed.
Mouldy pasties (2 cases) ..	Fined £15 plus costs.
Dirty bottle of milk	Fined £7 10s. 0d. plus costs.
Nail in herring roes ..	Case dismissed.

*Milk**Chemical Analysis*

Some 1,316 samples were submitted for chemical analysis.

Of the 67 deficient in fat, 38 were Channel Islands milks but 39 of the 67 were satisfactory upon calculation of the fat content of the bulked supply from each farm. Twenty-nine were below the standard for non-fatty solids and 7 were deficient in fat and non-fatty solids.

Letters to producers in respect of substandard Channel Islands milks were sent in 13 cases, and repeat samples were satisfactory.

Only 1 sample was found to contain added water and a repeat sample was satisfactory.

Biological Examination

Some 915 samples of raw milk, including that sold as tuberculin tested were secured for tubercle and brucella examination. Eleven samples from 6 producers were tuberculous, all being consigned to processing dairies.

Twenty-five samples from 17 producers were infected with brucellosis. Consignments from all but 4 were due for heat treatment. Milk from three was being sold raw as "tuberculin tested" and notices under the Milk and Dairies Regulations were issued by the Medical Officer of Health. These supplies were subsequently cleared by satisfactory samples. Milk from the fourth producer was diverted permanently to a processing dairy. In all cases the Divisional Veterinary Inspector was notified of the infection.

In the last five years the average percentage of samples infected with tubercle bacilli was 2.2 per cent, those with brucellosis was 4.6 per cent; 7.5 per cent of tuberculous samples in 1954 and 9.9 per cent infected with brucellosis in 1953 raised the average above the normal for the period, viz. 0.72 per cent to 1.2 per cent, and 2.6 per cent to 4.6 per cent respectively. Most of these milks were consigned to dairies for heat treatment.

Designated Milk

Four hundred and twenty-three samples of pasteurised milk, including 174 supplied to schools, and 52 sterilised milks were submitted to the prescribed tests. Nine failed the phosphatase test and one failed the methylene blue reduction test. The laboratory storage (atmosphere) temperature being above 65°F. discounted the methylene blue test in respect of 75 samples.

Two hundred and twenty-five samples of tuberculin tested milk, including that produced at a farm within the City operated by a Hospital Board, were secured, and 50 failed the methylene blue reduction test. Repeat samples are secured and notification sent where necessary.

Ice Cream

Of the 213 samples of ice cream secured for chemical analysis only one was below the statutory standard, being slightly deficient in fat. A repeat sample was satisfactory.

Some 283 samples submitted for the methylene blue reduction test were graded as follows:

Grade		1957	1956
1	.. ..	181	152
2	.. ..	50	69
3	.. ..	20	22
4	.. ..	11	24
Unclassified	..	21	—
TOTALS ..		283	267

Reference was made in the last annual report to persistent trouble with the product of one well-known manufacturer which led to a conference of local authorities concerned. The Company accepted criticism of their ice cream and it is pleasing to record that of the 39 samples of this product secured during the year, 30 were placed in grades 1 or 2, which demonstrates that improvements in their methods achieved the desired results.

Ice Lollies

One hundred and thirty-six lollies were submitted for chemical analysis. One article labelled as an "Ice Cream Brick" was in fact an ice lollie with no fat whatever in it. The shopkeeper making it was warned and put it down to an error in packeting!

One sample contained an excess of lead. A number of repeat samples from the same manufacturer were satisfactory.

Other Foods

Samples of colouring secured from school kitchens were reported as containing ethylene glycol, a substance which could have toxic effects, and the facts were reported to the Central Purchasing Department.

The Public Analyst reports a progressive deterioration in the meat content of a number of imported canned meats; the percentage of meat being below that required by an Order which operated after the war, but which has been rescinded.

Some tinned sardines were found to contain lead above the maximum recommended by the Food Standards Committee Report of 1954. Repeat samples were obtained and no more than the maximum recommended was discovered.

The Public Analyst continues to report upon samples of sausages in which the meat content is often below what at one time was legally enforceable, and it is noted that many questions are asked in Parliament about a standard for this commodity.

Medicines and Drugs

Of 546 samples of medicine and drugs secured, a few were adversely reported upon by the Public Analyst. Ammoniated tincture of quinine and iodine were deficient owing to long storage. Some soft soap labelled B.P. had deteriorated for the same reason. A sample of compound syrup of camphor contained 50 per cent. excess of morphine.

In each case representation to the shopkeeper secured the withdrawal or destruction of the commodity.

Articles sold as "champagne shampoo" and "beer shampoo" were found to contain 4 per cent. and 5 per cent. respectively of alcohol, not identifiable as champagne or beer!

Some "Vitorange Energy Tablets" were labelled as containing 12.5 m.g. of vitamin C per tablet. They were found to contain 0.22 m.g. The sample was secured in April, 1957, and the carton advised consumption before January, 1957. Six packets still in stock were immediately withdrawn.

Pharmacy and Poisons

Some 372 visits to premises of "listed" sellers of Part II poisons were made. Thirty-one samples of various commodities were secured.

In one case the chemical composition of an article warranted sale by "listed" sellers only; the vendor was not so listed. The omission was rectified.

Objection was made to extravagant claims of a comparative nature in respect of a sample of disinfectant. Representation to the manufacturers revealed that this commodity was no longer manufactured.

A slug killer containing bran was badly infested with live moth larvae! The vendor seemed surprised but withdrew the stocks.

With regard to medicines and drugs and to poisons, considerable attention is given to small general shops selling pre-packed medicines or preparations likely to contain scheduled poisons. Whilst labelling is rarely at fault it is common to find samples deteriorated by age.

Sampling at Corporation Establishments

Apart from school milk, samples of assorted foodstuffs were secured for analysis from eight school kitchens, the Civic Bakery and the Central Stores. Colouring material was adversely reported upon by the Public Analyst as containing an ingredient which could prove toxic. A sample of vinegar was below the accepted standard. Infestation and deterioration of some articles was found. In each case the foods were withdrawn or destroyed.

An arrangement has now been made with the Chief Purchasing Officer whereby he requests analysis of certain foods before issue to various Departments.

Fertilisers and Feeding Stuffs

Sixty-two formal and 89 informal samples of fertiliser and of animal feeding stuffs were secured for analysis. The Agricultural Analyst reported that the constituents were outside the limits of variation allowed by Regulations in 9 samples. No statutory statement or inadequate statutory statements were supplied in 18 cases. Follow-up action was taken in each instance.

Notices

A total of 151 notices were issued by the Food and Drugs Section, but most of these were in respect of infringements of the Food Hygiene Regulations. Including outstanding notices, 177 were complied with.

Food Poisoning

There were 137 notifications of suspected food poisoning received by the Section during the year. The 90 confirmed consisted of 33 single cases and

21 "incidents" of more than one case in a house, involving 57 persons. The confirmed cases were double those of last year which had a particularly low record.

One patient admitted to Ham Green Hospital with suspected dysentery which proved to be *salmonella typhimurium* was an employee, together with a sister, at a pie manufacturing company. Four other members of this family returned positive faeces specimens. The pie company immediately excluded the brother and sister on full pay and there was no spread of this infection.

Investigations of several cases at different homes revealed the consumption of cooked ham purchased at different shops. Further enquiry showed a common source of supply by one processing company. Investigation there, by an Assistant Medical Officer of Health, brought to light an employee with suspicious nasal symptoms. He was transferred to other work and no further cases connected with ham have been disclosed.

Dysentery

There is nothing of significance to report in respect of the 48 cases confirmed of dysentery out of 88 notifications received by the Section, except to remark on the exceptionally low figure compared with the last five years, which averaged 225 confirmed cases.

Typhoid and Paratyphoid Fever

Notifications of two cases of suspected typhoid and one of suspected paratyphoid fever were received, none of which was confirmed.

Precautionary faeces samples were obtained from a number of Hungarian refugees who came to the City early in the year, with negative results.

Weeds—Corn Production Acts (Repeal) Act

Eleven complaints of weed on land were received and dealt with as far as possible. Most of these were in respect of non-scheduled weeds.

Lectures and Demonstrations

Members of the Food and Drugs Section again shared in the comprehensive list of lectures, demonstrations and visits to food premises arranged for students, by the Health Department as a whole.

Dairies and Milkshops, etc.

1956	Registrations						1957
	<i>Milk and Dairies Regulations, 1949</i>						
67	Dairies	::	::	::	::	::	68
620	Distributors	::	::	::	::	::	622
	<i>Milk (Special Designation) Regulations, 1949</i>						
12	Pasteurised: Dealers' (Pasteurised) Licences					..	12
368	" Licences				..	..	388
18	" Supplementary Licences					..	18
2	Sterilised: " (Sterilisers) Licences					..	2
501	" Licences				..	..	512
9	" Supplementary Licences					..	11
31	Tuberculin " Licences				..	..	35
9	Tested: " Supplementary Licences					..	7
	<i>Food and Drugs Act, 1955</i>						
28	Manufacture, storage and sale of ice cream					..	28
1,196	Storage and sale of ice cream				..	..	1,229
212	Preparation of sausages or potted, pressed, pickled or preserved food	..	..	..	..	..	225
140	Fish frying premises	..	..	..	..	..	136
—	Butter factories	..	..	..	..	..	—
—	Wholesale dealers in margarine			..	..	..	—

Dairies and Milkshops, etc.

<i>Samples Taken</i>	<i>Samples not satisfactory</i>	<i>Chemical Analysis</i>					<i>Samples Taken</i>	<i>Samples not satisfactory</i>
1956							1957	
837	81	Milk	1,316	104
146	5	Ice Cream	213	1
1,798	6	Other foods	2,793	30
236	10	Medicines and drugs	546	11
12	4	Poisons	31	5
44	—	Rag flock	57	—
147	10	Fertilisers and feeding stuffs				..	157	13
115	13	Water (Baths)	161	7
70	—	Water (Other)	61	—
104	43	Miscellaneous	108	30
<i>Bacteriological examination:—</i>								
610	41	Milk T.B. exam.: City					915	35
		Somerset						
		Gloucestershire						
		Other Counties						
265	12	Milk, pasteurised	..	..	..	249	10
48	—	Milk, sterilised	..	..	..	52	—
207	1	Milk, schools	..	..	..	174	—
210	35	Milk, T.T.	..	..	..	225	50
267	19	Ice Cream	..	..	..	283	7
124	14	Plant tests	..	..	..	78	2
373	101	Churn and bottle tests	..	..	..	462	91
80	18	Shellfish	..	..	..	77	25
83	10	Water	..	..	..	127	29
24	1	Miscellaneous samples	..	..	..	84	12
<i>Visits (Not Sampling)</i>								
1956							1957	
441		Pharmacy and poisons	..	..	..	..	372
196		Dairies	..	..	..	..	166
178		Ice cream shops	..	..	..	..	264
—		Food preparing premises	..	..	..	..	267
561		Butchers shops	..	..	..	..	984
29		Infectious diseases (except food poisoning)	..	..	..	..	51
1,466		Dysentery	..	..	..	..	134
195		Food poisoning	..	..	..	..	256
15		Noxious weeds	..	..	..	..	16
3		Rag flock	..	..	..	..	8
543		Other Visits	..	..	..	..	773
<i>Notices</i>								
107		Informal notices	..	..	..	..	151
48		Informal notices complied with	..	..	..	..	177
3		Statutory notices	..	..	..	..	—
3		Statutory notices complied with	..	..	..	..	—
<i>Remedial Action</i>								
3		Premises altered and repaired	..	..	..	..	23
5		Premises cleaned and decorated	..	..	..	..	69
48		Other defects remedied (premises)	..	..	..	..	131
17		Hot water handwashing facilities provided	..	..	..	..	122
15		Heating provided	..	..	..	..	9
2		Drainage—Drains tested	..	..	..	..	—
3		Drains repaired	..	..	..	..	2
—		Choked drains repaired	..	..	..	..	1
3		Water closets—Flushing appliances provided	..	..	..	..	2
2		New pans provided	..	..	..	..	3
5		Other repairs	..	..	..	..	24
20		Lighting provided	..	..	..	..	50
28		Other nuisances abated	..	..	..	..	133

Other Registrations, Licences, etc.

1956		1957
	<i>The Rag Flock and Other Filling Materials Act, 1951</i>	
4	Licences to store rag flock	3
30	Premises registered to use filling material	32
	<i>Pet Animals Act, 1951</i>	
31	Licences to keep a pet shop	23
	<i>Pharmacy and Poisons Act, 1933</i>	
528	Listed sellers of Part I poisons	487
	<i>Slaughter of Animals Act, 1933-1954</i>	
70	Licensed slaughtermen	63
	<i>Food and Drugs Act, 1955—Section 62</i>	
4	Licensed slaughterhouses (Bacon Factories)	4
1	Licensed slaughterhouses	1
2	Licensed knackers' yards	2
	<i>Public Health Act 1936</i>	
	Offensive trade—annual consent—	
6	Premises	6
10	Trades	10
	Offensive trades—seven-yearly consent—	
1	Premises	1
1	Trades	1

Statistics

Samples submitted to the Public Analyst 1st January to 31st December, 1957:

Sampled under the <i>Food and Drugs Act</i> :—	1957	1956
Dry goods, spirits and drugs	3,552	2,180
Milk	1,316	837
Total	4,868	3,017
Water, swimming baths	161	116
Water, others	61	70
Filling materials	57	44
Fertilisers and feeding stuffs	151	147
Poisons—part II	31	12
Miscellaneous	108	104
Total	569	493
GRAND TOTAL	5,437	3,510

Samples submitted to the Bacteriological Laboratory 1st January to 31st December, 1957

Milk:—				1957	1956
Tubercle examination	..	..	..	915	610
Tuberculin tested	..	..	..	225	210
Pasteurised	..	..	..	249	265
Pasteurised (schools)	..	..	..	174	207
Sterilised	..	..	..	52	48
Ice cream	..	..	..	283	267
Water	..	..	..	127	83
Plant tests	..	..	..	78	124
Churn and bottle rinses	..	..	..	462	373
Shellfish	..	..	..	77	80
Miscellaneous	..	..	..	84	24
TOTAL	..	..	..	2,726	2,291

Adverse reports were received from the Bacteriological Laboratory in respect of the following samples:

Milk:—					1957	1956
Tuberculous*	..	..	..	..	36	41
T.T.	..	..	..	..	50	35
Processed	..	..	..	..	10	13
Ice cream—Grades 3 and 4	..	..	..	..	31	46
Plant tests	..	..	..	..	2	14
Churn and bottle rinses	..	..	..	..	91	101
Shellfish	..	..	..	..	25	18
Water:—						
Baths	..	..	..	..	29	—
Others	..	..	..	..		10

* Includes *B. Abortus* (11 were T.B.)

Appropriate action was taken in all of the above cases.

Food Hygiene

In the 1956 Report reference was made to the Food Hygiene Regulations, then just one year old, and to some of the difficulties which had been met with in the practical application of these Regulations. A further year of experience has enabled much valuable work to be done in educating food handlers in the principles of food hygiene, and there is no doubt that the general standard is constantly rising. On the other hand this second year has revealed further difficulties in administration; and legal arguments in court and magistrates' decisions have proved that many pitfalls lie in the path of anyone who seeks to interpret these Regulations at all strictly.

Undoubtedly the chief source of difficulty lies in the question of interpretation as many of the clauses of the Regulations are capable of alternative meanings of widely differing significance. There have not been sufficient Court cases to clarify many points and Inspectors naturally hesitate to proceed with a prosecution when they can clearly see that the defendant can easily argue a different interpretation to the clause.

It may well be that in the light of experience over the last two years, some redrafting of the Food Hygiene Regulations will be called for. Meanwhile much valuable work can be done by discussions with food traders and their employees so that their co-operation may be obtained in bringing about further improvement in premises and food handling methods.

City Water Supply

Particulars required by the Ministry of Health Circular

1. Whether the supply of the area and its several parts has been satisfactory in
 - (a) quality
 - (b) quantity

Yes.
2. When there is a piped supply, whether bacteriological examinations were made of the raw water and, where treatment is installed, of the water going into supply ; if so, how many and the results obtained; the results of any chemical analysis.

Raw waters examined bacteriologically before treatment by Bristol W.W. Co.
Raw water at Barrow before filtration—weekly.
Raw water at Chelvey before chlorination—twice weekly—when pumping.
Raw water at Litton before chlorination—weekly.
After treatment found satisfactory.
3. Where the waters are liable to have plumbo-solvent action the facts as to contamination by lead, including precautions taken and number of results of analysis.

Water is not liable to lead contamination and this is confirmed by weekly analysis of all City supplies.
4. Action in respect of any form of contamination.

On finding any trace of faecal contamination the matter is taken up with the appropriate authority immediately when further samples are taken until satisfactory results are obtained. Contamination after treatment has been negligible.
5. Particulars of the proportion of dwelling houses and the proportion of the population supplied from public water mains:—
 - (a) direct to houses;
 - (b) by means of a standpipe.

(a) The whole of the population in the Bristol area is supplied by the public water mains direct to houses with the exception of a few isolated premises in the rural suburbs where the supply is from private wells and subject to a form of chlorination. These are gradually being reduced as mains supply is laid on.
(b) Negligible.

ATMOSPHERIC POLLUTION

Cleaner Air Campaign

During the past year much has been said and published in connection with the *Clean Air Act, 1956*, and although the whole Act was not in force the operative provisions have stimulated much activity, thought, and discussion.

On the one hand Local Authorities have had to consider the establishment of smoke control areas, the approval of furnace plans, the heights of new chimneys, and the administrative arrangements to cater for these new duties and powers. On the other, industry and commerce have, on the whole, taken to heart the intention of the Act, and it is hoped that this attitude will be maintained. It is for Local Authorities to encourage and nurture interest of this kind.

In this City it has been found that there has been no need, so far, for the establishment of a consultative panel to approve new furnace specifications as is the case in many other towns, but present procedure is not rigid and may be reviewed.

The heights of new chimneys has been a controversial subject during the year, but in Bristol there has developed a co-operative spirit with architects

and heating engineers who are increasingly consulting the Department before finalising plans of new buildings. Public Notices regarding Sections 3 and 10 of the Clean Air Act, 1956, have been published in the local papers and a slip for attachment to planning permission forms has been printed. The notices and the slips indicate the requirements of the two sections. An article on the relationship of the Act to the work of architects was accepted by the Wessex Branch of the Royal Institute of British Architects for publication in their local journal.

There is a natural antipathy among architects to the building of high chimneys, which, aesthetically, spoil an elevation. It would, of course, be wrong for a Public Health Department not to consider the overall effect of a high chimney, but the purpose of the section is to prevent nuisance, and this must be a primary consideration of the Local Authority. An interesting point arose during the year in connection with a chimney that existed at the passing of the Act. The firm owning the chimney wished to reduce its height and, apparently, there is no legal power to stop such an operation in connection with existing stacks. However, it was fortunate that a second and lower chimney also existed on the premises and it was possible to demonstrate with it the probable effects of reducing the height of the first chimney. The happy result was that the firm agreed not to reduce the height of the first chimney and intend to raise the height of the second.

Smoke Control Area

During the latter half of the year the Health Committee agreed to proceed with the initial stages of a Smoke Control Area. Consequently, a central area was defined of roughly 220 acres, and this was divided again into four parts, so that if required the initial area could be of small, medium, or large acreage. An inspector with the additional Smoke Inspector's qualification was delegated to assist the Senior District Inspector upon the initial survey, which was well under way by the end of the year. The general attitude towards Smoke Control Areas amongst people contacted during the survey seems to be one of acceptance, and it is hoped that this enlightened view will prevail.

Industry and Clean Air

As mentioned before, industry is fully conscious of the Act, and it is noted that there is a preference for oil-firing in new boiler and furnace installations. Of 30 new installations, 23 were oil-fired, 4 were coke-fired, and the remainder heated by gas, electricity, or anthracite. The viscosity and consequent sulphur content of the oil used was an important factor in deciding the required chimney height and in discussing this with architects and heating engineers the faith put in oil as a trouble free and smoke free fuel was noted. Little, if any, thought was given to emissions of SO_2 other than its corrosive effect on boiler and chimney surfaces. In connection with oil-fired boilers it is interesting to read in *The Lancet* of the hazard of vanadium poisoning during the cleaning of boiler and furnace flues. The danger lies in the inhalation of the flue dust which, in the case of oil-firing, seems to carry a higher proportion of vanadium than that associated with coal-firing of furnaces.

Whereas the oil industry can feel happy about the impact of the *Clean Air Act* upon their activities, there is a certain amount of apprehension in the coal distributive trade as to the effect of smoke control area establishment upon its business. It would be better that the trade should be ready to meet the challenge and share in the distribution of smokeless fuels and oils. Thus the title "coal merchant" could become "fuel merchant" in the much wider sense.

Complaints and Action Taken

After the generalities relating to clean air work in Bristol what of the detailed work?

During the year 1,432 visits and observations were made by the inspectorate in connection with smoke and grit emission and 1957 was unique in that the first smoke nuisance case in Bristol was taken to the Courts and a successful result attained. Another likely Court case was eliminated by the closing down of the works on economic grounds. Action and special consideration was necessary in cases of zinc scrap melting and printing type metal melting, which processes were giving rise to fumes of zinc oxide and lead oxide respectively. Both plants were closed down, voluntarily, because of inability or unwillingness to take steps to deal with the emissions. A parallel case was the re-establishment of a scrap metal dealer, displaced from his original premises by a Compulsory Purchase Order, who wished to burn heaps of articles constructed of metal, allied with unwanted materials, such as rubber, wood, oil-cloth, etc., in order to recover the metal. (A typical example is the recovery of non-ferrous metals from electric cable.) The proposed new premises owned by the Corporation were to be leased to the scrap metal dealer and much discussion was necessary before the completion of the lease-contract. The dealer felt that this burning of unwanted materials was necessary to the proper conduct of his business and wanted a "permission" written into the terms of the lease. This was opposed strongly by the Chief Public Health Inspector who was well aware of the nuisance from the burning of rubber and other unwanted materials in scrap yards situated close to residential properties. The dealer agreed, eventually, that he would not carry out any burning of the kind objected to in the yard and the lease was duly completed.

Complaint about that veteran offender, the railway engine, was received during the year. The complainant lives near an engine cleaning area and was unhappy about the large quantities of grit and smoke that drifted across his house. Observations showed that dust was blowing from the coaling hoist which had been fitted with water sprays in an effort to settle the dust. It transpired on investigation that there was some difficulty in maintaining water pressure and at times the spraying was ineffective. Grit was being discharged also during the blowing of fire tubes; the combination of steam and tube-dust creating havoc with any washing upon which it might fall.

The smoke mainly arose from the making-up of engine fires after cleaning when little draught was available and lack of steam precluded the use of the blower. After contact with the Area District Motive Power Superintendent, there was considerable improvement, but the basic problem is still there and will remain until the complete modernisation of railway power is accomplished.

A source of smoke pollution that seems to be increasing is the incineration of waste materials which, in this City, include trimmings collected during the manufacture or use of paper, cellophane and filter-tipped cigarettes. A particularly troublesome incinerator was one used for the burning of tea chests. This type of combustion needs special consideration and incinerator design, according to the type of waste materials, and care has to be taken in the approval of new incinerators if trouble is to be avoided.

The feeling against the large gas works mentioned in last year's Annual Report simmered during the year, but since measures suggested to minimise smell have been undertaken it is not easy to pinpoint any other cause of nuisance. The works are being run and maintained as well as can be expected in the light of present-day knowledge, and it is difficult to see what more can be done. The circumstances of this case support the opinion that certain industrial

premises when surrounded by residential property can lead to difficulties and reminds all to be cautious when plans of proposed works are submitted.

Smoke Inspection Course

The work in connection with atmospheric pollution is technical and interesting and it is good to know that more and more public health inspectors are taking specialist courses in this field. The Public Health Department, in conjunction with the College of Technology, again arranged a course for smoke inspectors and eighteen inspectors, drawn from Bristol, Gloucestershire, Wiltshire, and Somerset attended. It is to the credit of these inspectors who live up to thirty miles from Bristol that their attendance was so regular during the winter months when travel can be so difficult.

Demonstrations and Lectures

Publicity in connection with air pollution has proceeded quietly but steadily and the use of suitable shop window spaces has been accepted for the erection of stand displays. Lectures to various organisations have been given.

The year 1958 promises much in the field of clean air work, mainly because the fixing of the operative date for the remaining sections of the *Clean Air Act, 1956*, is expected. New legislation is always a stimulus to effort and it is hoped that much will be achieved by an intelligent and practical application of the new Act, which deserves the active co-operation of the public and industry alike.

National Smoke Abatement Society

The Annual Conference of the National Smoke Abatement Society was held at Hastings and the Bristol Health Committee was represented by Alderman J. J. Milton and the Chief Public Health Inspector.

It is pleasing to report that Alderman Milton was again elected a Vice-President and that following a two-year period as Chairman of this Society the Chief Public Health Inspector was also honoured in this way. This reflects the interest taken in clean air by the Bristol Health Committee over many years, and its members must feel pleased about the nation-wide activity now taking place in this matter.

The Bristol and West Clean Air Committee

This Committee, formed in 1937, is a voluntary organisation of local authorities working towards a cleaner atmosphere.

Many meetings have been held and much useful work accomplished in recent years and during 1957 a short conference was held in Bristol on *The Clean Air Act, 1956*, with special reference to Smoke Control Areas.

This meeting was well attended and a great deal of information on the prevention of atmospheric pollution and the responsibilities of all users of heating appliances was disseminated through the local press.

GENERAL ENVIRONMENTAL HEALTH WORK

Plans and Planning

The examination of plans, forwarded by the City Engineer has, once again, formed a major duty of the Department. Over 600 plans were received during the year and each one was carefully perused by the appropriate section of the staff. The correspondence entered into direct with architects leads, in most cases, to telephonic discussion or interview and every opportunity is taken to

be as helpful as possible by acquainting architects with legislation and generally explaining the public health reason for any amendments required to plans.

A close-working relationship has been established with the City Architect's department and some of our members of staff are, on occasions, invited to discuss projects whilst they are in the embryo stage.

Since the coming into operation of Section 10 of the *Clean Air Act, 1956*, special attention has been paid to plans showing proposed boiler installations, and discussions have been necessary in almost all cases where a plan showed that a chimney was to be constructed. Where the height, as indicated on the plan, was not considered adequate, having regard to the broad principles laid down in Section 10 of the Act, a satisfactory solution was achieved.

The work involved with plans is considered to be one of the more positive achievements of the Chief Public Health Inspector's section, since many unsatisfactory features associated with the proposed alteration or development of premises can be avoided by correction at the "plan stage."

Hospital Catering Survey

It is a well-known fact that the Food Hygiene Regulations are not applicable to the hospital service. This does not, however, preclude Hospital Boards from seeking the advice of the Medical Officer of Health on matters contained within the *Food and Drugs Act, 1955*, and regulations made thereunder.

It is pleasing to report, therefore, that the Medical Officer of Health was approached by the Secretary of the United Bristol Hospitals with a request that the catering arrangements from the central stores through to ward meal service should be examined with a view to assessing the standard of hygiene attained. With this in view discussions between the Secretary of the Board, the Medical Officer of Health, and Chief Public Health Inspector took place, and subsequently one of the senior public health inspectors was detailed to carry out a full survey.

The survey includes five hospitals, a Nurses' Home, a School of Nursing and the Central Stores. The inspection is being carried out on two main lines:

1. A comparison with the requirements of the Food Hygiene Regulations;
2. The standard which it is considered can reasonably be applied to hospitals.

In addition to the survey the inspecting officer, again at the request of the Secretary, arranged to give lecture/demonstrations and to show appropriate films to all hospital catering personnel and domestic and ward orderly staff.

The inspection and lecture programme will be completed during the early part of 1958.

Weights and Measures Department—Food Hygiene

The primary duty of Local Authorities is to ensure that statutory obligations, laid upon them by legislation, are complied with. It is also the duty of Local Authority departments to ensure that they set a high standard in any sphere where, by reason of their duties, they must conform with the standards enforceable on others.

During the year the Chief Weights and Measures Inspector approached the Medical Officer of Health and the Chief Public Health Inspector with a request that the hygiene of his department's work should be examined so that he and

his staff might not offend the Food Hygiene Regulations in carrying out their duties. This request was readily agreed to and the investigation was carried out on the following lines:—

(a) The overall nature of the work performed by the Weights and Measures Department was discussed with the Chief Inspector in order to assess the extent to which their duties might result in risk of contamination of food stuffs.

(b) A senior inspector accompanied Weights and Measures inspectors on their routine duties and noted those features of their operations where hygiene could be improved.

It was obvious that the Weights and Measures inspectors were conscious of the need to avoid criticism in food premises and in the main carried out their work in a hygienic manner.

The report prepared on the investigation has proved helpful to the Weights and Measures Department, particularly the precautions necessary when checking the various types of weighing instruments and the potential risk of contamination of food through hands and the use of their standard weights. These factors are important when one realises that a rank of shops may include butchers, chemists, confectioners, tobacconists, greengrocers, and so on.

Requests for permission to use the hand washing facilities of shops are made, the inspectors having an individual issue of soap and towel. In order to meet the circumstance where the use of a wash hand basin might be refused, a type of hand cleansing pad was devised by the dispensary at the Central Health Clinic, and these can be used in conjunction with clinical sheets for hand washing.

In order that the staff of the Weights and Measures Department should have a better understanding of the recommendations made they have arranged to attend a lecture/demonstration and film show on the subject of food hygiene early in the new year.

This desire by the Chief Weights and Measures Inspector and his staff “to do the right thing” is a commendable example of a Corporation department appreciating its responsibilities and demonstrates, too, the close relationship which exists between the various departments of Bristol Corporation.

Paddling Pools

Paddling pools are to be found in many parks where Local Authorities endeavour to provide forms of amusement for children. The provision of paddling pools may, however, set up a number of health problems and be the source of complaints from neighbouring properties.

As a result of complaints received by the City Engineer, the Health Department was invited to inspect several paddling pools in the City's parks and to prepare a report and submit recommendations on them.

There are several major factors to be taken into consideration in assessing the suitability of a paddling pool. It is important that it should be suitably sited for two reasons:

(a) It should be in a position where park rangers can exercise adequate control over the pools. Tins and broken glass are frequently thrown into the pools by children; dogs are encouraged to romp in the water and because of the shallowness of the water, it is a common practice for children to wade in Wellington boots, or even ride their bicycles through the pool.

(b) Pools sited close to dwelling houses can be the cause of noise complaints by residents. The shrieks and other noises emanating from the play of children in and around a paddling pool can be a real source of annoyance in such cases and this point has to be carefully considered when choosing a site initially.

It is important, too, that the pool should be of a size which can be readily emptied, cleaned and refilled. A small circular pool with a paved surround and a peripheral half-channel drain constitutes a controllable and readily cleansed unit.

The quality of the water should undoubtedly conform to a standard comparable with that for swimming baths. The shallowness of the water in the pool does not prevent small children from lying or sitting in the water with a consequent contamination potential equal to that of a swimming bath.

These and other matters were taken into account in the preparation of the report and forwarded to the City Engineer for his consideration.

An opinion was sought by the owner of a children's paddling pool as to its purity. Samples were secured and acting upon the advice of the Public Analyst, chlorination was carried out by the owner to a point where it was rendered safe.

Arising from this, samples secured from the ornamental pools at the Council House and the Victoria Rooms, which were used at times by children, were found to be unsatisfactory from a bacteriological point of view. Upon representations by the Medical Officer of Health the water in the Council House pool was drained and is not to be replaced; that at the Victoria Rooms was periodically chlorinated.

Trichology

Even though there is increasing legislation available to deal with public health matters, there are occasions when the Chief Public Health Inspector's staff has, in the absence of specific legislation, to give advice in connection with special classes of premises.

This was the case when a trichology establishment, with facilities for Swedish massage and electrolysis, was proposed in one of the main shopping areas of Bristol. Discussion with the proposer at the premises resulted in a complete change of layout, improvement of ventilation, provision of adequate sterilising equipment, provision of an appropriate dispensary and adequate hand washing and sanitary accommodation for the staff.

The proposer appreciated the help and advice given and proceeded to act on the recommendations forthwith.

Discolouration of Decoration—Hairdressing Salon

During the year a request was made by the Welfare Services Department to investigate the blackening of walls of the ladies' hairdressing salon of an Aged Persons' Home. The walls of the salon were finished in a heavy gloss cream paint and were found to be extensively discoloured. The room was ventilated by natural means only with the result that the atmosphere was hot and humid.

The material applied to the hair for permanent waving consisted of a mixture of "permanent waving wireless reagent" and "permanent waving oil." By taking the stopper out of the bottle of the first mentioned constituent of the mixture and applying the neck to the wall, black discolouration was instantaneous. Subsequent discussion with the Public Analyst confirmed the cause of the wall discolouration. Permanent waving solutions in use at the present time for the most part contain ammonium thioglycollate, an organic substance containing sulphur. Solutions of ammonium thioglycollate are likely to decompose with the production of sulphuretted hydrogen and it was the production of this gas that, in conjunction with lead gloss paint, produced the blackening effect on the walls.

The Welfare Services Department was advised to redecorate the salon, using a really lead-free material. In addition, the provision of mechanical ventilation extract units was suggested and salon operators were warned that rubber gloves should be worn when handling the waving mixture due to the capacity of the substance to soften hands and nails.

Technical Training

Technical training centres such as Bristol, are having to cope with an increasing demand for instruction in environmental health. The importance of preventive health work and the extent to which so many can help in this direction, whether in their professional capacity or otherwise, is being more fully realised. The safeguarding of health has now become appreciated as a vital and economic necessity, and it is pleasing to those whose vocation is directly concerned with promoting health to see the momentum of this trend develop.

In order to prevent any delay in training public health inspectors, first and second year courses were commenced during 1957. Both are part-time evening courses, and all students are employed full-time with various public health departments in Local Authorities throughout Gloucestershire, Wiltshire and Somerset or with the Bristol County Borough. Whilst this form of theoretical training is not to be compared with the type of course anticipated by the Public Health Inspectors' Education Board, it does, in the interim, maintain a potential of well trained public health inspectors.

There was again a demand for a smoke inspectors course and sixteen inspectors from the three counties and Bristol are attending for instruction at the Engineering Department of the College of Technology.

As in previous years a series of lectures has been given to Pre-Nursing and Institute of Housing courses, and four courses in Food Hygiene were arranged for domestic science and basic catering courses at the Women's Department of the College of Technology.

Trainee Public Health Inspectors

The trainee scheme instituted in 1955 continues to prove a valuable asset to the Department and at the same time affords a high standard of training for the pupil inspectors.

Two of the trainees are on the final year of the public health inspectors' course and three others are attending the present first year of the course.

The students continue to take an active part in office and practical work and have been of great assistance in keeping records and generally assisting the inspectorial staff in their many duties.

Foreign Visitors

Eleven students from the Sudan, Malaya, Afghanistan and the West Indies visited the Chief Public Health Inspector's office during the year. They were given instruction in environmental health, and the various aspects of the work were demonstrated by a series of practical visits.

The instruction given to our friends from overseas is not only a pleasurable duty but does, through interchange of information, help us to realise the standard of health control achieved in our own country.

RAT DESTRUCTION, DISINFECTION AND DISINFESTATION

Rodent Control

A policy of unrelenting and scientific warfare continues against rodents throughout the City and dock areas of Bristol. So often the rat is looked upon merely as an undesirable and terrorising pest but public health departments take the broader view and in their efforts to keep down the rat population to a minimum, have as their object the control of transmissible disease and prevention of contamination and wastage of food stuffs.

The total number of complaints received during the year is as follows:—

Rats	..	..	..	..	1,927
Mice	..	..	..	..	947
Total	..	..	..	..	<u>2,874</u>

The number of complaints brought forward from the previous year as incompletely dealt with was 117, making the total number of complaints dealt with during this year 2,991. To cover these complaints the Rat Operators made 13,432 visits.

The following table shows how these complaints were dealt with:—

	<i>Business Premises</i>	<i>Dwelling Houses</i>	<i>Local Authority</i>	<i>Total</i>
No action required	54	183	8	245
Cleared by department	917	1,216	407	2,540
Cleared by occupier	21	95	1	117
Incompletely dealt with c/fwd. ..	28	37	24	89
Totals	<u>1,020</u>	<u>1,531</u>	<u>440</u>	<u>2,991</u>

Under Part 1, Section 3 of the *Prevention of Damage by Pests Act, 1949*, 2,676 occupiers have notified this section that rats and mice infested their premises and appropriate action has been taken.

Verbal notices have been served on occupiers or owners of 198 premises drawing attention to their obligations under the above Act. In all cases these notices have been complied with.

Discretionary powers regarding the waiving or adjustment of charges in view of the financial position or due to causes outside the control of the occupier have been applied in 39 cases.

The great impetus of new building, coupled with the demolition of old properties, was expected to cause some dispersal of rat population throughout the City, but, due to preventive measures and constant inspections, no widespread infestations occurred.

The Corporation refuse tips, destructor works, river banks, parks and open spaces were regularly inspected, and any infestations found have been brought under control.

The offensive trades in the St. Philip's Marsh area and the surrounding property continue to be free of any serious infestation, and systematic treatment and frequent inspections ensure that this position continues.

Defective drains resulting in rat infestation were reported to the Health Department in 122 cases, and in all instances appropriate action was taken.

The two maintenance treatments of the City sewers, as laid down by the Ministry of Agriculture and Fisheries, were carried out by the City Engineer's staff under the direction of the Rat Officer, with the following results:—

No. of manholes baited	4,219
No. of manholes showing prebait takes	2,803
No. of manholes showing poison takes	1,894

Efforts have been made to obtain more information regarding rat infestation existing in the sewer system and for this purpose particular attention was paid to areas of the system which show heavy poison takes with corresponding areas above ground. The secondary sewers and house drains associated with these main sewers are also closely watched and treated as found necessary.

The number of wasps nests dealt with during this period was 102 and 48 occupiers were given advice on how to deal with others which were easily accessible.

The dock areas of the City, Avonmouth and Portishead have been regularly inspected and, where necessary, treatment was carried out. The granaries, sheds and warehouses in the docks area are in a very clean condition, and the number of rats recovered during this period is probably the lowest on record. This is reflected in the absence of damage to food stuffs and materials stored there, and regular inspections and treatment of these areas will ensure that this position is maintained.

Advice and assistance in the control of rabbits, woodpigeons, foxes and badgers, have again been given in many instances. On the outskirts of the City, rabbits became more numerous and caused damage to gardens, allotments, etc.

The general condition of the City and County gives cause for a high measure of satisfaction, but Bristol, situated as it is, must always be prepared and take measures to prevent an influx of rats from its seaborne trade or any other source of infestation.

The total number of rats recovered from all sources was as follows:—

			1957		1956	
			RR	RN	RR	RN
City			105	142	211	127
Avonmouth			246	101	328	203
Portishead			—	—	—	—
Bristol			1	—	—	—
Totals ..			594		869	

Rat Repression

No. of Complaints of Rats or Mice *Dealt with by Corporation* *Dealt with by Occupier* *No action required* *Outstanding*

<i>Outstanding 1956</i>	<i>Received 1957</i>				
117	2,991	2,540	117	245	89

Bodies recovered from premises:

<i>Black Rats</i>	<i>Brown Rats</i>	<i>Mice</i>
105	142	97

Docks area:—

Bodies recovered:—

<i>Rattus rattus</i> (black)	<i>Rattus norvegicus</i> (brown)	<i>Mice</i>
246	101	—

Rat Repression—Summary of work done during 1957

1956				1957			
<i>Business</i>				<i>Business</i>			
<i>Premises</i>	<i>Houses</i>	<i>Other</i>	<i>Total</i>	<i>Premises</i>	<i>Houses</i>	<i>Other</i>	<i>Total</i>
45	27	24	96	Complaints incompletely dealt with brought forward			
986	1,316	441	2,743	Complaints received ..			
1,031	1,343	465	2,839	49	46	22	117
				971	1,485	418	2,874
				1,020	1,531	440	2,991
				<i>Remedial action:—</i>			
				<i>Infestation cleared:—</i>			
941	1,104	439	2,484	By Corporation ..			
14	62	—	76	By occupiers ..			
27	131	4	162	No action required ..			
49	46	22	117	Incompletion at end of year carried forward			
1,031	1,343	465	2,839	917	1,216	407	2,540
				21	95	1	117
				54	183	8	245
				28	37	24	89
				1,020	1,531	440	2,991
<i>Avon-mouth</i>	1956		<i>Total</i>	<i>Avon-mouth</i>	1957		<i>Total</i>
	<i>Bristol</i>	<i>Portis-head</i>			<i>Bristol</i>	<i>Portis-head</i>	
				<i>Rats recovered:—</i>			
				<i>Docks, quays, wharves, etc.</i>			
203	—	—	203	Brown			
328	—	—	328	Black			
30	—	—	30	Mice			
				101	—	—	101
				246	—	—	246
				—	—	—	—
				<i>City:—</i>			
			127	Brown			
			211	Black			
			66	Examined for plague			
			75	Mice			
				142	—	—	142
				105	—	—	105
				66	—	—	66
				97	—	—	97

Disinfection and Disinfestation

Disinfection and disinfestation as a positive means of controlling the spread of disease play a valuable role in the wide field of preventive and environmental health work carried on locally, nationally, and internationally.

Public health legislation in this country affords adequate powers for local authorities to ensure disinfection and disinfestation where required. In practice the enforcement of such powers is rarely needed for this is one of the fields of public health in which there is very good—indeed, almost anxious—co-operation by the public.

Much reliance is now placed on concurrent disinfection, i.e. disinfection at the time of illness; this is in most cases followed by terminal disinfection when contaminated clothing, bedding and other articles used by a patient are removed to the station and subjected to the form of treatment most suitable for the articles.

Through improved standards of hygiene and of living, people have become less tolerant to infestation of any kind, and have ceased to regard bugs, lice and fleas as evils which have to be accepted.

The main base for disinfection and disinfestation is at the Disinfecting Station at Feeder Road, St. Philip's Marsh. The station is an integral part of the Public Health Department and can be used by any citizen in need. The staff, under the supervision of the Station Superintendent, are mobile and armed with modern equipment to carry out treatment of premises.

ADMINISTRATION OF THE SHOPS ACT, 1950 AND KINDRED LEGISLATION DURING 1957

Shops Act 1950

General Administration

The year has seen a complete reorganisation of the administrative arrangements for enforcing the provisions of the Shops Acts.

Mr. E. G. H. Spencer, Chief Inspector since 1949, resigned and took up a new appointment as Chief Clerk in the environmental health section in October 1957. The Health Committee took the opportunity of integrating the shops and public health inspectorate by appointing Mr. F. J. Redstone as Chief Shops Inspector in November.

Staff changes early in the year, coupled with sickness of the only remaining experienced assistant at that time, led inevitably to a reduction in the number of visits. Indeed, the actual number of routine visits to premises subject to the provisions of the Shops Acts amounted to only 6,154 compared with 6,859 in 1956, and 10,339 in 1955, when the full staff of inspectors was available. It is expected that following the reorganisation the number of visits will once again increase.

A summary on page C 43 shows the remedial action taken when infringements of the Acts were found, and also the numbers and types of premises visited.

Four prosecutions were made and the defendants fined a total of £41 3s. 0d., including advocates' fees.

Exemption Orders

The Health Committee made three orders during the year exempting the promoters of exhibitions from observing the normal closing regulations but in three other cases the Committee were not satisfied that the retail business to be carried on was subsidiary or ancillary to the main purpose of the exhibition and declined to make orders in those instances.

Complaints

Fewer complaints were received during the year and of the actual number investigated about a tenth related to conditions affecting shop assistants' working conditions.

Observation Patrols

All inspectors undertook duty during evenings and week-ends as and when necessary and the usual early closing day patrol was maintained. This patrol was effective in securing alternative half days for many assistants found working on their normal half day in shops closed to the public, and who would probably be deprived of the same but for the patrol.

Gowers Report

A special sub-committee of the Association of Municipal Corporations met frequently to consider the proposals for amending legislation, but no conclusions had been reached up to the time of this report.

Other Enactments

(a) *The Young Persons (Employment) Act, 1938*

There are only sixty-nine employers employing young persons subject to the provisions of this enactment, and little cause for complaint was found. Seventy-one initial visits were made during the year and two revisits to ensure that remedial action had been taken in respect of contraventions observed on previous occasions.

(b) *Employment of Women, Young Persons and Children Act, 1920*

Following last year's legal proceedings against the British Transport Commission for employing persons under the age of eighteen years at night, four visits and two revisits were made to local depots. The Health Committee received a deputation from the Commission consisting of representatives of British Railways, Western Region, in order to enable them to inform the Committee of their difficulties and of the steps they proposed to take to resolve the problem.

(c) *The Sunday Entertainment Act, 1932*

No infringements of the conditions imposed by the Licensing Justices were observed by 53 visits to cinemas opening on Sundays, and only one revisit was necessary.

Overseas Visitors

Officers engaged on similar duties to Shops Inspectors were received from Southern Rhodesia, Nyasaland, Kenya, Northern Rhodesia and British Guiana. Each was given a resumé of the legislation in this country and then accompanied an inspector on a tour of inspection. These visits are arranged by the Ministry of Labour and National Service who have expressed their keen appreciation of the close co-operation enjoyed between the Health Department and this particular Government department.

Lectures

During the early part of 1957 the then Chief Inspector gave explanatory talks on the provisions of the Shops Act, the Young Persons Employment Acts and other kindred legislation to

- (i) Students taking the pupil health visitor course;
- (ii) Members of the independent traders alliance;
- (iii) Fried fish caterers' course at the College of Commerce.

Shops Act, 1950

1956								1957
	<i>Visits</i>							
6,057	Retail	..	..	..	..	..	..	4,988
182	Wholesale	..	..	..	..	..	..	202
	<i>Revisits:—</i>							
681	Retail	..	..	..	..	..	..	921
19	Wholesale	..	..	..	..	..	..	43
	<i>Infringements:—</i>							
425	Failure to exhibit notices	..	..	..	..	..	..	620
29	Half-holiday and compensatory holiday	..	..	..	..	..	..	19
13	Hours of Young Persons	..	..	..	..	..	..	3
10	Meal Intervals	..	..	..	..	..	..	14
5	Seats for female assistants	..	..	..	..	..	..	11
463	Verbal Warnings	..	..	..	..	..	..	640
17	Warning Letters	..	..	..	..	..	..	23
2	Legal Proceedings	..	..	..	..	..	..	4
309	Assistants' Facilities—Referred to C.S.I. (Section 38)							221
	<i>Sunday Entertainment Act, 1932—Cinemas</i>							
53	Visits	..	..	..	..	..	..	53
14	Revisits	..	..	..	..	..	..	1
1	Infringements (holidays)	..	..	..	..	..	..	—
1	(records)	..	..	..	..	..	..	—
—	Verbal Warnings	..	..	..	..	..	..	—
—	Reported to Licensing Justices	..	..	..	..	..	..	—
	<i>Young Persons (Employment) Act, 1938</i>							
76	Visits	..	..	..	..	..	..	71
9	Revisits	..	..	..	..	..	..	2
	<i>Infringements—</i>							
2	(1) Night employment and hours	..	..	..	..	..	..	3
3	(2) Records	..	..	..	..	..	..	—
3	(3) Meal Intervals	..	..	..	..	..	..	—
2	(4) Half-day and compensatory holiday	..	..	..	..	..	..	3
10	Verbal Warnings	..	..	..	..	..	..	6
—	Warning Letters	..	..	..	..	..	..	—
	<i>Employment of Women, Young Persons and Children Act, 1920</i>							
19	Visits	..	..	..	..	..	..	4
5	Revisits	..	..	..	..	..	..	2
2	Legal Proceedings	..	..	..	..	..	..	—
	<i>Inspectorial Staff—Evening and Sunday Visits</i>							
33	Evenings	..	..	..	..	..	..	30
38	Sundays	..	..	..	..	..	..	31

THE REPORT OF THE PUBLIC ANALYST AND OFFICIAL AGRICULTURAL ANALYST FOR THE CITY AND COUNTY OF BRISTOL FOR THE YEAR 1957

(Incorporating the Work on behalf of the County of Gloucester for the same period and for the City of Gloucester from April to December, 1957)

E. G. Whittle, B.Sc. (Lond.), F.R.I.C.

STAFF FOR THE YEAR 1957

<i>Public Analyst</i>	.. ..	E. G. Whittle, B.Sc. (Lond.), F.R.I.C.
<i>Additional Public Analyst</i>	..	I. Dembrey, B.Sc. (Bristol), F.R.I.C.
<i>First Assistant</i>	.. ..	G. G. Fisher, B.Sc. (Birm.), A.R.I.C.
<i>Second Assistant</i>	.. ..	D. J. Taylor, B.Sc. (Lond.), A.R.I.C.
<i>Assistant Analysts</i>	.. ..	Miss M. V. Westcott, M.Sc. (Bristol), Miss A. Sinclair Rose, B.Sc. (Dublin).
<i>Assistant Spectroscopists</i>	..	N. J. Atherton, Mrs. J. K. Noyes.
<i>Chief Technician</i>	.. ..	C. R. Turner.
<i>Chlorination Officer</i>	..	R. C. M. Putnam.
<i>Student Technicians</i>	.. ..	D. M. Cormack, M. A. Wagner, Miss S. A. Johnson, Miss D. M. Rhead, R. G. McKenna, J. S. Wilson, A. C. Jacobs, Miss M. deGay.
<i>Secretary</i>	.. ..	Mrs. I Hall.
<i>Laboratory Attendants</i>	..	Mrs. N. Budd, Mrs. Comber (part time).

INTRODUCTION

With the staff at full strength throughout the year the number of examinations fell just short of the 10,000 mark. The actual figure was 9,737 and this represents the highest number of samples ever reached in any of the fifty years of the laboratory's existence giving full-time service to the City.

Whilst this is indeed a most creditable performance by an ever willing and co-operative staff, what is perhaps more significant is the ever-growing importance of an analytical and consulting service to local authorities responsible for nearly a million people. This laboratory now serves not only the City and County of Bristol, but also the County of Gloucester and the City of Gloucester, together with the several Urban and Rural District Councils within the County. Indeed, only a glance at this report will show that there are few branches of the local authorities' activities and services with which the Analyst is not concerned at some time and in some small way throughout the year.

An increase in examinations was noted in practically all phases of the work for the City of Bristol and notably in Milk, 1,316 samples against 837 in 1956; Food and Drugs, 3,552 against 2,184; Fertilisers and Feeding Stuffs, 199 against 162. There has been a notable stepping up of Feeding Stuffs sampling at the Port where several factories manufacture large quantities for nation-wide distribution.

Interest in radioactivity was well maintained throughout the year and there is little doubt that Analysts will have to pay increasing attention to this subject. Early in the year seven members of the staff attended a two-day course of lectures and practical work organised by the College of Technology, during which many aspects of the subject in relation to Food and Water were discussed by an eminent panel of lecturers.

Then in October there occurred the "Windscale incident" which has had some most surprising repercussions. Again a local course of lectures organised by the South-West Section of the Society for Analytical Chemistry and South-West Public Analysts brought together no less than eighteen Public Analysts and their deputies to hear a further series of lectures with emphasis on instrumentation. Later in the year I was authorised to visit the Scientific Adviser to the London County Council for consultation and the outcome of that meeting is discussed fully in the last section "Other Activities" of this Report.

As already mentioned, the staff position has been decidedly easier during the year. B. C. Forty left in May and was succeeded by Miss M. deGay. We wish Forty well in his new appointment with Messrs. Carsons. In September, Miss S. A. Johnson decided to avail herself of the newly devised scheme of "sandwich courses". She resigned to continue her studies, and in her place we welcomed back Mr. G. P. Hall who had just completed National Service obligations. Mr. D. M. Cormack left at the end of the year. He secured an appointment with the same firm as Mr. P. Havas who left in 1956. We wish Cormack every success in his new career with Messrs. T. Lucas of Kingswood. I would also wish to refer to the untimely death of Dr. Cormack, David's father, and my very good friend. At the end of the year Mr. N. J. Atherton, the mainstay and senior assistant in the Spectrographic Section, secured an appointment at Harwell at a salary nearly double that pertaining to his post here! This point is made, and stressed, because it is yet another instance of the attraction of outside organisations and our own inability to retain staff at sufficiently attractive salaries. Indeed, I feel I may not be stating the case too drastically to add that to a great extent senior staff may only remain out of a sense of loyalty, coupled with the fact that they are not particularly anxious to uproot themselves and make a new start elsewhere in their advancing years! Nevertheless the baits are often extremely attractive and could be easily swallowed!

The Annual Report is perhaps the one place where the Head of a Department can express publicly to his staff his thanks for their valuable help and willing co-operation and this I most willingly do, stressing, in particular, the support and cheerful service of Mr. Dembrey, Mr. Fisher and Mr. Taylor. Our more recent arrivals, Miss Westcott and Miss Rose, have worked conscientiously and well considering that neither had had any previous experience of this type of work.

I would also acknowledge with gratitude the work of my secretary, Mrs. I. Hall. She continues to cope well with the increasing burden of reports, and it is quite apparent that there is sufficient work in the office for a junior clerk. This appointment has been approved and will, I hope, be filled early in 1958.

Relationships with the Inspectors of the City of Bristol, County of Gloucester, the City of Gloucester and of the various Urban and Rural authorities have been most happy throughout the year. I thank all concerned for their consideration, help and understanding.

Finally, I wish to thank the Health Committee for their continued approval of my secretaryship of the Standards Committee of the Association of Public Analysts. This Committee is doing valuable work in formulating standards of

composition, codes of practice, and agreements on food problems, and it is of great value to the work of this Department to be in, as it were, on the "ground floor" of negotiations.

The Report is divided in the usual fashion into ten parts as under:

	Introduction.
Part I	Food and Drugs Act.
Part II	Fertilisers and Feeding Stuffs Act.
Part III	Waters, Swimming Bath Samples, Effluents, Sewage and Chlorination.
Part IV	Rag Flock Act.
Part V	Pharmacy and Poisons Act.
Part VI	Miscellaneous Analyses.
Part VII	Report on work for the County of Gloucester.
Part VIII	Atmospheric Pollution.
Part IX	Spectroscopy.
Part X	Other Activities.

Summary of Examinations

Table I—Bristol

Milk	1,316
Food and drugs	3,552
Waters and swimming baths	321
Fertilisers and feeding stuffs	199
Miscellaneous	776
Rag Flock Act	57
District Inspectors' samples	30
Pharmacy and Poisons Act	31
Atmospheric Pollution—	
Lead peroxide	143
Deposit gauges	107
Silica and phosphorus	36
Zinc and fluorine	24
Smoke recordings, City of Bristol	59
Smoke recordings, Port of Bristol	314
Spectroscopic analyses	822
Chlorination visits and examinations	249
	<hr/>
	8,036

Table 2—County of Gloucester

Milk	722
Food and Drugs	523
Waters	105
Fertilisers and feeding stuffs	74
Miscellaneous	73
Atmospheric pollution—	
Lead peroxide	66
Deposit gauges	60
Merchandise Marks Act	1
Pharmacy and Poisons Act	2
	<hr/>
	1,626

Table 3—City of Gloucester

Food and Drugs	68
Fertilisers and feeding stuffs	2
Deposit gauges	5
	<hr/> 75
Grand total	<hr/> 9,737 <hr/>

PART I. FOOD AND DRUGS ACT

New and Modified Legislation, 1957

The year was relatively quiet as far as published legislation was concerned although from contacts with the Ministry via the Association of Public Analysts it is apparent that there is much being done and much more to do to bring food legislation up-to-date and in line with modern thought.

Perhaps the most important piece of legislation, however, came into operation in June, 1957. This was the *Colouring Matter in Food Regulations, 1957, S.I. No. 1066*. These Regulations apply to England and Wales only and

- (a) Revoke the provisions of the *Public Health (Preservatives, etc., in Food) Regulations, 1925*, as amended relating to the colouring matter in food (Regulation 3 and the 4th Schedule).
- (b) Prohibit the sale or importation of food containing any added colouring matter other than that specified in the 1st Schedule (Regulation 5 and the 1st Schedule).
- (c) Prohibit the sale or importation of certain raw and unprocessed foods having in or upon them, otherwise than for marking purposes, any added colouring matter at all, except that citrus fruit may have permitted colouring if it is suitably indicated in accordance with the Regulations (Regulation 6).
- (d) Prohibit the sale or advertising for sale of any food colouring matter which is not a permitted colouring matter and impose requirements as to the labelling of permitted colouring and colouring and flavouring compounds (Regulation 7).
- (e) Prohibit the sale or advertising for sale of any food colouring matter which is not permitted by the Regulations that food may be treated for the purposes of Section 9 of the *Food and Drugs Act, 1955*, as being unfit for human consumption (Regulation 8).
- (f) Do not apply to food or colouring intended for export. The Regulations list 30 permissible coal tar products together with
 1. Caramel and the colour from cochineal.
 2. The following colours of vegetable origin—any colouring matter natural to edible fruits or vegetables and alkannet, annatto, carotene, chlorophyll, flavine, indigo, orchil, osage orange, persian berry, safflower, saffron, sandalwood, turmeric; or their pure colouring principles whether isolated from the natural colours or produced synthetically.

3. Bole or iron oxide, carbon black, titanium dioxide, ultramarine and, solely for the external colouring of dragees and the decoration of sugar-coated flour confectionery, silver or aluminium in leaf or powder form.
4. The aluminium or calcium salts (lakes) of any of the scheduled water-soluble colours.

The Public Analyst Regulations, 1957, re-enacted substantially the provisions of the 1939 Regulations as respects qualifications to be possessed by persons appointed to be Public Analysts and prescribed a revised form of certificate to be given in pursuance of section 92 of the *Food and Drugs Act, 1955*.

The Food Standards Committee Report on the Ice Cream Standard made the recommendation that the *Ice Cream Order, 1953*, should be amended, subject to further investigations of the problems of overrun, as follows:

- (a) to provide that the description "dairy ice cream" (and variants likely to suggest the use of dairy ingredients) may only be applied to ice cream in which the whole of the fat content (other than any necessarily introduced by the use of a flavouring material) is milk fat;
- (b) to provide a standard for "milk ice," viz. that it shall contain—
 - (i) not less than 2·5 per cent milk fat;
 - (ii) not less than 7 per cent milk-solids-not-fat;
 - (iii) no fat other than milk fat;
- (c) to revoke the present provisions relating to the sugar content of ice cream but to include a prohibition on the use of saccharin or other artificial sweetening agents in ice cream (including that containing fruit), milk ice and Parev (kosher) ice;
- (d) to prohibit the use of milk or milk products in "Parev" (kosher) ice.

The Food Standards Committee published in December revised recommendations on Fluorine in Foods. The limits now proposed entail substantial reduction in the limits at present in force under the *Fluorine in Food Order, 1947*. The report recommends the following:

<i>Articles of Food</i>	<i>Maximum Fluorine Content</i>
(i) Acidic phosphates	30 p.p.m.
(ii) Any article of food (not included in items (iii) and (iv) below) containing acidic phosphates and intended for use in the composition or preparation of food	30 p.p.m. of the acidic phosphates present
(iii) Baking powder, including golden raising powder . .	15 p.p.m.
(iv) Self-raising flour or any similar mixture (not included in item (iii) above) containing a farinaceous substance and an acidic phosphate.	3 p.p.m.

TABLE 4

Foods

<i>Nature of Sample</i>	<i>Total Examined</i>	<i>Number adulterated or otherwise irregular</i>
Milks	1,316	79
Aspic jelly	1	—
Artificial cream thickener	1	—
Almond paste and marzipan	32	—
Bread	3	—
Bread milk	4	—
Butter	50	1
Baking powder	11	—
Beer and ale	50	—
Blancmange powder	11	—
Butter beans	2	—
Biscuits	11	—
Bread crumbs	2	—
Candied peel	28	—
Curry powder	4	—
Cream	98	—
Cakes, pastries and mixtures	70	—
Cider and perry	38	—
Canned meat	47	2
Canned fish	101	3
Canned tomatoes	9	—
Canned fruit	22	—
Canned vegetables	15	—
Canned soup and powder	25	—
Cornflour	14	—
Cheese, processed, spread	61	—
Cooking fat	27	—
Cocoa	4	—
Custard powder	25	—
Crystallised ginger	1	—
Crystallised fruit	7	—
Condensed and evaporated milk	34	—
Coffee, ground	28	—
Coffee and chicory essence	30	—
Coffee extract	1	—
Carrot juice	1	—
Cake icing	1	—
Canned spaghetti	1	—
Cloves	2	—
Chicken fillets	1	—
Cockles	1	—
Chocolate spread	4	—
Chocolate vermicelli	2	—
Christmas pudding	1	—
Desiccated coconut	17	—
Doughnuts	9	—
Dehydrated onions	3	3
Dried fruit and vegetables	123	—
Drinking chocolate	9	—
Dripping	11	—
Dried herbs	15	—
Dandelion coffee essence	1	—
Edifas	4	—
Flour 100% stoneground whole wheat	1	—
Flavourings, colourings and essences	112	—
Flour, plain, S.R.	61	1
Frozen potato chips	1	—
Fish cakes and fingers	15	—
Farinoca	3	—
Fruit confectionery	1	—

<i>Nature of Sample</i>	<i>Total Examined</i>	<i>Number adulterated or otherwise irregular</i>
Frosted fish sticks	2	—
Fondant cake icing	1	—
Glace fruit	17	—
Gravy browning	23	—
Gelatine powder	15	—
Ginger	2	—
Golden syrup	13	—
Ginger beer	6	—
Glucose	1	—
Ground almonds	21	—
Ground figs	1	—
Golden crumbs	1	—
Horseradish relish	7	—
Haricot beans	7	—
Jelly powder, cubes and crystals	41	—
Instant Whip	1	—
Ice cream powder	2	—
Ice cream	213	1
Ice lollies	136	—
Icing mix	1	—
Lemon flavour pie filling	1	—
Lard	27	—
Laverbread	1	—
Lentils	2	—
Lemonade powder and crystals	7	—
Marshmallow in wafers	2	—
Margarine	67	—
Milk flavour	2	—
Mashed potato powder	1	—
Mint sauce	7	—
Meat extracts	13	—
Meat products	13	—
Mixed herbs	13	—
Mustard	11	—
Milk powder	10	—
Milk Plus	1	—
Mixed spice	5	—
Macaroni, Elbows	4	—
Mussels	2	—
Nuts	23	—
Nutmeg	1	—
New Berry Fruits	1	—
Oranges	7	—
Oatmeal	1	—
Puff pastry	11	—
Pepper	13	—
Parfait icing	1	—
Pickles and chutney	19	—
Preserves—jam, mincemeat, marmalade, lemon curd, honey	123	—
Purified Cream of Tartar	1	—
Porridge oats	1	—
Potato crisps	20	—
Pastes, fish, meat	68	—
Prepared cream, sage and tapioca	2	—
Peel, mixed	1	—
Pure wheat embryo	1	—
Patum Peperium	1	—
Peanut butter	5	—
Pearl barley	1	—
Prawns	2	—
Peardrax	1	—
Raising powder, golden	10	—

<i>Nature of Sample</i>	<i>Total Examined</i>	<i>Number adulterated or otherwise irregular</i>
Rice	35	—
Rolled oats	1	—
Ravioli	1	—
Seasoning	4	—
Sweet corn	1	—
Savoury straws	1	—
Suet	7	—
Soft drinks and mineral water	83	—
Salad cream and mayonnaise	25	—
Shortening	1	—
Soda water	8	—
Sauces and chutney	65	—
Sweets	95	—
Sugar—brown, castor, icing	45	—
Semolina	13	—
Salt	15	—
Slippery Elm Food	1	—
Stuffing	6	—
Sausages—pork, beef, Vienna	96	—
Spirits	71	—
Sago	1	—
Sage	1	—
Shrimps	4	—
Swedish Milk Diet	1	—
Snails	1	—
Tapioca	7	—
Tea	33	—
Unsalted cake margarine	1	—
Vinegar—malt, non-brewed condiment	63	2
Whey Cream Butter	1	—
Wine	32	—
Water	3	—
Welsh rarebit	3	—
Whipping compound	1	—
Yam	1	—
Yeast and tablets	7	—
	<hr/> 4,331 <hr/>	<hr/> 92 <hr/>

Drugs

Analgesic tablets	1	—
Acriflavine cream	1	—
Asthma tablets and linctus	2	—
Antiseptic cream and lozenges	2	—
Alophen	1	—
Anadin tablets	1	—
Aspirin tablets, soluble, compound	10	—
Ammoniated mercury ointment	2	—
Ascorbic acid tablets	6	—
Almond oil	7	—
Aneurine tablets	4	—
American Cough Syrup	1	—
Anticoryza tablets	1	—
Ammoniated tincture of quinine	12	—
Aniseed sweets	4	—
Bronchial Balsam and Mixture	3	—
Boracic powder	6	—
Boric acid ointment and powder	8	—
Bicarbonate of soda	8	—
Beecham Powders	4	—
Backache pills	1	—
Borax, purified	3	—

<i>Nature of Sample</i>	<i>Total Examined</i>	<i>Number adulterated or otherwise irregular</i>
Beer shampoo	1	—
Bronchial mixture	1	—
Chlorodyne	1	—
Cream of Magnesia tablets	1	—
Cascara Sagrada tablets	1	—
Catarrh pastilles	1	—
Compound syrup and oil of camphor	6	1
Cold cream	3	—
Cough linctus and syrup	2	—
Camphorated oil and chalk	10	—
Chilblain cream	4	—
Cod liver oil	7	—
Carbromal tablets	1	—
Castor oil	8	—
Chest and lung lozenges	1	—
Compound liquorice powder	1	—
Calamine lotion	9	—
Codeine tablets B.P.	4	—
Calcium lactate B.P.	4	—
Cinnamon of quinine	1	—
Cold capsules	2	—
Cold and influenza mixture and tablets	5	—
Chocolate sweetened with Mannitol	1	—
Chocolate laxative	7	—
Diarrhoea mixture	1	—
Distilled Witch Hazel	1	—
Diabetic chocolate	1	—
Diabetic marmalade	1	—
Decolourised iodine	1	—
Emulsion of Cod Liver Oil	2	—
Epsom salts	3	—
Embrocation	1	—
Eucalyptus oil	11	—
Energy tablets	1	—
Ephedrine tablets	2	—
Ephedrine Hydrochloride Tablets	5	—
Eight rubbing oils	1	—
Flowers of sulphur	7	—
Friar's Balsam	3	—
Fluid Extract of Cascara Sagrada	1	—
Gripe mixture	1	—
Glauber's Salt	5	3
Glucose tablets and sweets	15	—
Glycerine, pure	11	—
Glycerine and blackcurrant pastilles	1	—
Glycerine of borax	1	—
Glucose drink	1	—
Glucose, medicinal and powdered glucose	1	—
Glucose coated peanuts	1	—
Glycerine, lemon and ipecac mixture	1	—
Glycerine of Thymol B.C.P.	9	—
Glycerine, lemon and honey oil	3	—
Glycerine, lemon and honey sweets	1	—
Halibut Liver Oil Capsules	7	—
Hydrogen peroxide	10	—
Influenza mixture	4	—
Iodine ointment	2	—
Indian Brandee	3	—
Infirmary Syrup	1	—
Indigestion tablets	1	—
Inhalant	3	—
Iodised Sarsaparilla Blood Mixture	1	—
Linctus of Codeine	1	—

<i>Nature of Sample</i>	<i>Total Examined</i>	<i>Number adulterated or otherwise irregular</i>
Lung Tonic and Healer	2	—
Liquid paraffin	5	—
Liquorice powder	9	—
Laxative chewing gum and tablets	3	—
Lozenges of Mucilage of Linseed	1	—
Lozenges of Oil of Aniseed	1	—
Lozenges	2	—
Lozenges of Peppermint and Purified Glucose	1	—
Milk of Magnesia Tablets	4	—
Medicinal liquid paraffin	1	—
Metatone	1	—
Medicated sweets	6	—
Nicotinic acid tablets	7	—
Ointment	1	—
Olive oil	5	—
Ointment of sulphur	4	—
Oil of cloves	4	—
Ointment shampoo	1	—
Panadol	1	—
Phenol Ointment	3	—
Parrish's Chemical Food	9	—
Peppermint concentrate and oil	4	—
Phenacetin tablets	9	—
Peppermint sweets and lozenges	5	—
Peppermint oil and solution	3	—
Potassium bromide tablets	3	—
Potassium chlorate	5	—
Phenolphthalein tablets	3	—
Red Pectoral Syrup	1	—
Rose hip syrup	4	—
Raspberry truffle	1	—
Stabilised wheat germ	1	—
Spike lavender	1	—
Salicylic ointment	3	—
Sodium salicylate tablets	4	—
Sodium citrate tablets	4	—
Soap spirit	1	—
Soda mints	8	—
Saccharin tablets	8	—
Sal volatile	10	1
Soft soap	1	—
Sulphur tablets and lozenges	7	—
Sedative tablets	1	—
Seidlitz powder	15	—
Stomach digestive tablets	1	—
Syrup of White Pine Tar	1	—
Syrup of Figs	4	—
Sugarless table jelly	1	—
Special diabetic oranges	1	—
Slimming tablets	1	—
Soap liniment	1	—
Shampoo Champagne	1	—
Sweetex Sweetening Tablets	1	—
Tincture of iodine	7	1
Throat and cough pastilles	5	—
Tartaric acid	12	—
Toothpaste	3	—
Teething powder	4	—
Travel sickness tablets	3	—
Tyrosets	1	—
Toothache tincture	1	—
Throat and chest sweets	1	—
Vitamin and chilblain tablets	1	—

<i>Nature of Sample</i>	<i>Total Examined</i>	<i>Number adulterated or otherwise irregular</i>
Vegetable laxatives	1	—
Vitamin capsules and pellets	2	—
Vitamin food	1	—
Veganin Tablets	2	—
White precipitate ointment	5	—
Yeast and tonic tablets	2	—
Zinc and castor oil ointment	5	—
Total of Drugs	537	6
Total of Foods and Milk	4,331	92
Total	4,868	98

Table 5—Percentage Adulteration Over 5 Years

	1953	1954	1955	1956	1957
Total number of samples	2,750	2,750	3,179	3,012	4,868
Milks per cent adulterated	4.67	8.43	5.52	8.48	6.0
Foods (other than milk) per cent adulterated	0.89	0.36	0.35	0.36	0.33
Drugs per cent adulterated	1.18	2.42	0.77	2.99	1.2
Total per cent adulterated	1.64	2.65	1.26	2.81	2.0

Table 6—Average Composition of Genuine Milks for 1957

Bristol	<i>Month</i>	<i>No. of samples</i>	<i>Fat % average</i>	<i>Non-fatty solids % average</i>
	January	107	4.29	8.90
	February	100	4.08	8.91
	March	104	4.13	8.86
	April	103	4.04	8.69
	May	93	3.87	8.78
	June	73	3.98	8.93
	July	103	3.82	8.83
	August	113	4.18	9.02
	September	130	3.94	8.99
	October	69	4.07	9.02
	November	109	4.04	8.89
	December	133	4.08	8.96
	Total	1,237	4.04	8.90
Gloucester				
	January	59	4.01	8.70
	February	42	3.99	8.87
	March	75	3.70	8.77
	April	50	3.60	8.73
	May	55	3.56	8.87
	June	55	3.60	8.79
	July	67	3.94	8.74
	August	47	3.83	8.94
	September	69	3.87	8.89
	October	61	3.97	8.96
	November	48	3.98	9.00
	December	55	3.79	8.85
	Total	683	3.82	8.84

Table 7—Action taken on Adulterated Foods and Drugs, and other Samples Requiring Comment

No.	Commodity	Formal or Informal		Nature of Deficiency or Irregularity	Action Taken
		Formal	Informal		
VD 17	Confectionery (Crystallised fruits)		Informal	Enquiry into labelling and description of these products	All samples were satisfactory No action
VD 18	Confectionery (Crystallised fruits)		"	Enquiry into labelling and description of these products	
VD 19	Confectionery (Crystallised fruits)		"	Enquiry into labelling and description of these products	
VD 20	Confectionery (Crystallised fruits)		"	Enquiry into labelling and description of these products	
VD 21	Confectionery (Crystallised fruits)		"	Enquiry into labelling and description of these products	
VD 22	Confectionery (Crystallised fruits)		"	Enquiry into labelling and description of these products	
VD 23	Confectionery (Crystallised fruits)		"	Enquiry into labelling and description of these products	
VD 43	Confectionery (Crystallised fruits)		"	Enquiry into labelling and description of these products	
VD 98	Malt vinegar	Formal		Only 50 per cent malt vinegar	Label on barrel implied a mixture. No action Stock disposed of. (School kitchen) Letter to manufacturers Stock disposed of by shopkeeper Letter to manufacturers
VD 147	Mince-meat	Informal		Beginning to ferment	
XD 177	Butter	Formal		Contained 16.4 per cent water	
VD 2	Pickled walnuts	Informal		Old stock. In very poor condition	
VD 57	Dehydrated onions			Sulphur dioxide 210 p.p.m.	
XD 94	"	"		" " 320 "	
ZD 35	"	"		" " 210 "	
VD 117	Soda water	"		Correctly prepared but CO ₂ had disappeared	
VD 169	Almond flavour	"		An emulsion which had broken	Repeat samples satisfactory Stock disposed of. (School kitchen) Old stock—disposed of. (School kitchen) Letter to retailer Letter to retailer. Barrel withdrawn Food destroyed. (School kitchen) Repeat sample taken Premises closed. Repeat sample not obtainable Letter to retailer. Old stock destroyed
ZD 26	S.R. flour	"		Only 0.3 per cent available CO ₂	
VD 99	Malt vinegar	Formal		A non-brewed condiment	
WD 64	"	"		A non-brewed condiment containing 200 ells per 100 ml.	
XD 107	Semolina	Informal		Infested	
YD 60	Glauber's Salt	"		Not Glauber's salt BP.1953 (above strength)	
YD 65	"	"		Not Glauber's salt BP.1953 (above strength)	
YD 106	Sal volatile	"		Only 0.6 per cent ammonia	

Table 7—(continued)

<i>No.</i>	<i>Commodity</i>	<i>Formal or Informal</i>	<i>Nature of Deficiency or Irregularity</i>	<i>Action Taken</i>
VD 187	Canned pineapple	Informal	Contained a fragment of metal	Foreign produce. No action. (School kitchen)
VD 190	Malt vinegar	"	Contained 1 per cent salt	Permissible if declared. (School kitchen.) No action
VD 207	Lemon slices	"	Enquiry into correct labelling and description of product	No action. Sample satisfactory
VD 217	Minced beef loaf	"	Sample not labelled	Wholesaler contacted—no further stock Retailer visited and notice stating "cream" removed
WD 172	Cream slices	"	No evidence of butterfat	
YD 23	Seidlitz Powder	"	Weight of No. 2 powder low	Deviations not regarded as of serious consequence. No action
YD 30	" "	"	Weight of No. 2 powder low	
YD 107	Sal Volatile	"	Weight of No. 1 powder slightly high	
YD 115	"	"	Slightly low in ammonia	
WD 193	"Canned sardines	"	Lead 15 " " " " " " " "	Deficiencies not regarded as of serious consequence. No action
WD 268	" "	"	Lead 13 p.p.m.	
WD 339	Canned minced loaf	"	Lead 10 p.p.m.	Repeat samples WD.259-269 taken Repeat samples WD.284-285 taken. Satisfactory
WD 343	Canned luncheon meat	"	Lead 15 p.p.m.	
YD 153	Glauber's Salt	"	Effloresced	Repeat sample WD.345. Satisfactory Repeat sample WD.346. Satisfactory Vendor visited. Old stock disposed of YD.217 repeat sample. Letter to retailer Stock withdrawn from sale
YD 154	Compound Syrup of Camphor	"	Excess of morphine	
YD 217	" "	"	" " " " " " " "	
ZD 300	Canned sardines	"	Lead 15 p.p.m.	

No samples of particular brand available for re-sampling

Table 7—(continued)

No.	Commodity	Formal or Informal	Nature of Deficiency or Irregularity	Action Taken
VD 246	Champagne Shampoo	Informal	Reducing substances equivalent to 0.3 per cent of alcohol	Presence of champagne neither proved nor disproved. No action
VD 253	Energy tablets	"	Devoid of Vitamin C	Old stock—disposed of
VD 301	Pork sausage	"	Poor quality, 60 per cent meat	No standard. No action
VD 305	"	"	" " 58 per cent meat	No indication that a mint sauce must contain mint leaves. No action
VD 343	Mint sauce	"	No mint leaves	
VD 348	Canned spaghetti	"	Can badly rusted	Contents sound. No action
VD 360	Ice lolly	"	Satisfactory, but labelled as Ice cream lolly	Letter to producer
WD 198	Ground rice	"	Infested	Stock destroyed
WD 355	Jam and cream sponge	"	Not more than 12.5 per cent butterfat in the fat of the filling	No standard. No action
WD 359	Essence of Rennet	"	Failed to set	Repeat sample taken
WD 316	Pork sausage meat	"	Poor quality, 61 per cent meat	No standard. No action
WD 323	Pork sausages	"	88 per cent total meat of which 53 per cent was fat	No standard. No action
WD 172	Cream slices	"	No milk fat present	Retailer warned and advised to insert word "Imitation" on display card
VD 404	Cream cakes	"	Not more than 3 per cent butterfat in the filling	Not labelled as "Cream" cakes. No action
VD 474	Onion shreds	"	Sulphur dioxide 800 p.p.m.	Manufacturers previously notified. No action
VD 482	Tomato soup powder	"	Infested	Stock disposed of. (School kitchen)
VD 559	Ice lolly	"	Lead 10 to 20 p.p.m.	Accidental contact with wrapper after sample taken. No action
VD 567	" "	"	Lead 2 p.p.m.	Repeat samples taken VD.658-691, and found satisfactory
VD 595	Essence of Rennet	"	Out of condition	Old stock. No further sample available
VD 167	Currants	"	Infested	Stock disposed of
VD 626	"	"	"	"
VD 367	Flavoured Rennet	"	Out of condition	"
				Failure probably due to use of heat-treated (pasteurised) milk. No action.

Table 7—(continued)

<i>No.</i>	<i>Commodity</i>	<i>Formal or Informal</i>	<i>Nature of Deficiency or Irregularity</i>	<i>Action Taken</i>
WD 388	Beef sausage meat	Informal	Only 45 per cent meat	No statutory standard
WD 480	Pork sausage	"	" 55 per cent meat	
WD 481	" "	"	" 54 per cent meat	
XD 340	Ice cream	"	Fat only 4.9 per cent	
XD 360	Ice cream	"	10 per cent deficient in fat	Repeat sample taken, XD.360
XD 399	Salt—"Bios" brand	"	Mis-labelled	Verbal warning to manufacturer
YD 284	Tincture of iodine	"	14.5 per cent deficient in iodine and 13.5 per cent deficient in potassium iodide	Repeat sample taken XD.365. Satisfactory
YD 360	Ammoniated Tincture of Quinine	"	Deficient in ammonia	Further letter to manufacturers. Label will be amended when present stock is exhausted
VD 676	Stewed steak	"	Meat 67 per cent. Poor quality	Retailer visited and stock destroyed
VD 677	Corned beef loaf	"	Meat 67 per cent. "	Repeat sample taken YD.426
VD 679	Luncheon meat loaf	"	Meat 68 per cent. "	No standard operative
WD 555	Pork luncheon meat	"	Meat 64 per cent. "	
WD 559	Luncheon meat	"	Meat 70 per cent. "	
WD 560	Pork luncheon meat	"	Meat 73 per cent. "	
WD 561	Luncheon meat	"	Meat 68 per cent. "	No action
WD 563	Pork luncheon meat	"	Meat 66 per cent. "	
WD 565	Pork luncheon meat	"	Meat 65 per cent. "	
WD 566	Pork luncheon meat	"	Meat 80 per cent. "	
VD 827	Miniature "Collectors Pieces" bottles representing "Cherry"	"	Possible contravention of labelling provisions of Food and Drugs Act and of the Merchandise Marks Acts	Town Clerk communicated with manufacturers and requested they stress need of exhibition of label stating true contents to retailers.
VD 828	Herring, "Hennessy's Brandy," etc. and containing sugar syrup	"	Possible contraventions of labelling provisions	
VD 843	Chocolate bottle with Bass label	"	Possible contraventions of labelling provisions	
VD 844	Chocolate bottle with Guinness label	"	Possible contraventions of labelling provisions	
WD 788	Whole almonds	"	17 per cent of nuts infested. Poor quality	No action
WD 790	" "	"	4 " " " " " "	
WD 791	" "	"	3 " " " " " "	
				Retailer visited. Stock disposed of

Table 7—(continued)

No.	Commodity	Formal or Informal	Nature of Deficiency or Irregularity	Action Taken
WD 744	Liquid apple green colouring	Informal	Contained ethylene glycol—toxic	} School kitchen sample. Town Clerk advised and arranged withdrawal
ZD 636	" "	"	Contained ethylene glycol—toxic	
XD 491	Cut drained peel	"	Contained a piece of metal	
XD 501	Beef suet	"	In poor condition	} Repeat samples satisfactory
XD 648	Walnuts	"	20 per cent unfit nuts. Infested, decomposed and mouldy	
XD 649	"	"		
ZD 674	Brazil nuts			
YD 404	Soft soap	"	Sample dried out—very old stock	} Visited and stock disposed of
YD 425	Ammoniated Tincture of Quinine	"	0.5 per cent w/v ammonia. Inefficient closure of bottle	
YD 505	Oil of almonds, Syrup of Violets and Squills	"	Separation of oil. Some mould growth. Old stock	} Stock destroyed
ZD 600	Margarine	"	Slightly rancid	
ZD 602	Dried peas	"	Poor quality. Some pest infestation	

School kitchen samples—stock disposed of

Food and Drug Comment

The foregoing table gives information on various samples found to be adulterated or worthy of comment. A few additional details are here given on specific problems.

Several samples of confectionery "crystallised fruits" were considered in respect of composition and labelling. The pictorial designs would in several cases suggest the presence of real fruits in sugar. Authentic preparations were particularly obvious when price was considered but cheaper confections were in some instances very "borderline." Most contained vegetable fibres which probably derived from fruit flavouring materials but there was no identifiable fruit. With some reluctance these dubious preparations were passed as satisfactory.

Three samples of dehydrated onions contained significant amounts of sulphur dioxide ranging from 200 to 300 p.p.m. As the Preservative Regulations exist at the moment this is a contravention, but since other dried vegetables are allowed preservative in even higher amounts, this would appear to be an oversight by the Ministry when drafting the limitations for dried vegetables.

Vinegars still cause confusion on sale, for non-brewed condiment continues to be sold where vinegar is called for. The public will certainly take a lot of educating on some of these finer points of differentiation and much the same situation arises over the use of the word "cream."

According to Section 47 of the 1955 Act, the word "cream" must not be included in a voluntary description of an article which resembles cream in appearance, but is not "cream", unless it is designated as "reconstituted cream" which must be a milk product or as "imitation cream" which results from the emulsification of edible oils and fats. There is, however, nothing to stop a trader selling an article with some filling that resembles cream, and many conceivably contain no fat at all, provided the word "cream" is avoided.

Human nature being what it is, there is an understandable objection to using words like "reconstituted" or "imitation" and various attempts have been made to avoid such usage. Obviously where genuine cream is used this is stressed in advertising.

The use of the word "Devon" is a popular choice, whilst other traders exhibit notices disclaiming the use of dairy cream. Prosecutions have resulted in conflicting decisions upon the validity of such notices.

As the Senior Food Inspector for Bristol has rightly stressed, it is always possible to trap the unwary shopkeeper or his assistants where descriptions are omitted by asking for "cream cakes" which do not contain real cream exactly as was above mentioned in the case of non-brewed condiment.

There appears to be a serious omission in the 1955 Act because there is no bacteriological control on the sale of "synthetic creams" which is what is primarily required. The 1938 Act did at least require manufacturers to be registered.

There have been a few cases of misdescription in Bristol during the year, but tactful approach and advice have secured the necessary amendments.

Several canned items, sardines, minced loaf and luncheon meat contained excessive amounts of lead of the order of 10-15 p.p.m. Repeat sampling produced satisfactory results with lead figures less than 5 p.p.m. One brand was not available for re-sampling.

Several samples of sausages were criticised for low meat content but no legal action was taken. The pork sausages ranged from 54 to 61 per cent of

meat—a not unreasonable “standard” is 65 per cent. Similarly with one beef sausage the meat content was 45 per cent which compares unfavourably with an acceptable minimum of 50 per cent. One sample of pork sausage contained 88 per cent of meat, but of this, 53 per cent was fat! It is perhaps not unreasonable to expect that not more than half of the total meat content should be fat.

The position regarding the chemical composition of ice cream in respect of the *Ice Cream Order* is very satisfactory. Only one sample of 213 failed to satisfy the provisions and that in respect of fat.

The situation with certain meat products is less happy and there appears to have been a decided fall in the meat content of a number of products when assessed in the light of the now defunct *Meat Products (No. 2) Order*. The meat contents prescribed in that Order did not appear unduly high and were considered to represent reasonable commercial practice. Recent samples have been between 10 and 30 per cent lower in meat content—an undesirable trend which the Ministry should seek to check.

With the approach of the festive season a number of packet food “miniatures” appeared on the market. Small bottles with labels were exact replicas of most of the well known brands of wines and spirits, and these labels included declarations of the amount of proof spirit. Labelled cartons were faithful copies of the well known foods. The contents were either syrups or sweets. The manufacturers had attached these miniatures to cards with a statement as to the contents, but vendors had detached the cards and had failed to substitute some other form of description. The Town Clerk’s Department agreed that exposure and sale under these circumstances constituted offences against the labelling provisions of the *Food and Drugs Act* and of the *Merchandise Marks Act*. This was pointed out to the retailers and to the makers. The Customs and Excise authorities stated that they had no interest in the “spirit” miniatures if these contained simply syrup.

A somewhat similar instance of trading upon the popularity of well known goods was the sale of “beer bottles” made of chocolate having reproductions (or possibly originals) of labels of nationally known beer and stout. The “bottles” were obviously made of chocolate and no action on the question of labelling was considered necessary. The question of infringement of copyright or of the permission to use such labels must obviously rest with the brewers concerned.

Other seasonable goods came under review. A number of samples of whole almonds were condemned and later destroyed because of infestation.

Samples of walnuts and brazils contained up to 20 per cent of unfit nuts which were decomposed, mouldy or infested. The Sorrento or kiln-dried walnut is generally of higher quality than the “wet” nut from India and China. For these latter we have tended to accept, and indeed expect, up to 20 per cent unfit nuts. Anything significantly worse than this would be unacceptable and would warrant condemnation.

Two liquid apple-green colourings obtained from school kitchens were found to contain ethylene glycol as the vehicle for the colour. Some years ago diethylene glycol was found in similar usage. There seems little to choose between the toxicity of these glycols as far as humans are concerned. Whilst it is appreciated that very small amounts of the colouring are required it seems unnecessary to use toxic chemicals when other solvents are available. The offending colourings were withdrawn from use and later a new supply was examined. The vehicle was glycerine and the “colour” comprised three of the

permitted coal-tar colours—Tartrazine yellow, Blue VRS, and a small amount of Orange RN.

A sample of a “natural” but balanced salt—the description itself somewhat conflicting—was found to be mislabelled. A complete analysis was provided on the label and was supposed to represent all the ingredients in one ounce, 28·35 grammes. Upon totalling, the ingredients actually gave 30·2 grammes. The manufacturers agreed to amend the information on new labels but apparently the sale of the product was somewhat limited and the old type pack was still on sale six months later.

A sample of laverbread was examined chemically with reference to possible siliceous matter. Only 0·1 per cent acid insoluble material was found. The laver or *Porphyra lanciniata* or *P. vulgaris* is a type of seaweed growing within the range of the tide. It has fronds deeply and irregularly cleft varying according to the locality. Both species are eaten after being boiled for many hours until the fronds are reduced to a somewhat slimy pulp of dark brown colour. It is then made into a cake by covering with oatmeal and fried in butter. An average composition of laver is 17·4 per cent water, 82·6 per cent dry matter of which some 29 per cent is protein. Perhaps even more interesting is a comment made by the Deputy Head of the Windscale Research and Development Laboratories speaking recently in London: “Even if radioactive effluent is discharged far out to sea and diluted down to permitted levels, both seaweed and salt can concentrate it again.” He added: “For some reason our Welsh friends eat a concoction of seaweed and we have to look after them. It would perhaps be easier to get them not to eat laverbread!”

Summary of Milk Examinations

Ordinary Milk.—Minimum presumptive requirements 3·0 per cent milk fat and 8·5 per cent solids-not-fat. Twenty-four samples with abnormal solids-not-fat, but no evidence of watering. Sixteen samples of poor quality in respect of fat at only 2·9 per cent, but most proved satisfactory when bulked in appropriate consignment. Nine samples deficient in fat but again most were satisfactory upon bulking. Two “Appeal to Cow” samples gave fats of 2·8 and 2·3 per cent respectively. The producer and the Ministry were informed.

Channel Island.—Minimum absolute requirement 4·0 per cent of bulk fat. Twenty-eight samples were deficient in fat and most were satisfactory on bulking. Eight samples were regarded as of poor quality since the fats were only 3·9 per cent. Four samples showed abnormality in solids-not-fat, that is below 8·5 per cent. This is an unsatisfactory state of affairs when one remembers that a Channel Island milk should give a figure of about 9·0 per cent solids-not-fat.

One sample besides being 20 per cent deficient in fat contained not less than 3·5 per cent of added water which incidentally was the only watered milk discovered throughout the year.

In all, 79 milks of the 1,316 examined were adulterated or otherwise irregular. The foregoing summary will not total exactly to this figure because of “overlapping” faults of poor quality, abnormality of solids-not-fat, and fat deficiencies.

Details of Legal Action Taken

<i>Case</i>	<i>Action</i>
Metal in congress cake ..	Fined £15 plus £2 2s. costs.
Nail in black pudding ..	Plea guilty. Fined £2 plus £3 3s. costs.
Dirty milk bottle ..	Fined £7 10s. plus £2 2s. fees.
Fishroes containing a nail ..	Case dismissed.

PART II. FERTILISERS AND FEEDING STUFFS ACT

Table 8—Summary of Samples Examined

			<i>Formal</i>	<i>Informal</i>	<i>Irregular</i>
Bristol—					
Feeding stuffs	..	..	30	23	13
Fertilisers ..	..	..	30	65	37
			<u>60</u>	<u>88</u>	<u>50</u>
			—	—	—
Avonmouth—					
Feeding stuffs	..	..	48	—	4
Totals	..	..	<u>108</u>	<u>88</u>	<u>54</u>
			—	—	—

Table 9

Nature of Irregularity

Observations

5	Vitax DS.	Low sol. P_2O_5 . High insol. P_2O_5	Repeat sample taken—F. & F. 29
8	No. 3	Some reversion of phosphate	Copy of report sent
9	No. 1	High insol. P_2O_5	Not to prejudice of purchaser but copy of report sent
10	Potassic	Slight reversion of phosphate	Copy of report sent
11	Seamus General Mixture	High insol. P_2O_5 . High nitrogen and K_2O	" " " " " " " "
14	Bone meal	Slightly high P_2O_5	Not to prejudice of purchaser. No action
16	Sangral 10-day Fertiliser	High sol. and insol. P_2O_5 . High K_2O	" " " " " " " "
17	Layers mash	Requires statement of oil, protein and fibre	Letter and extract of Act sent
18	Garden lime	No statement supplied	Letter to retailer sent
19	Sangral	High sol. and insol. P_2O_5 . High K_2O	Not to prejudice of purchaser. No action
21	Layers mash	Requires statement of oil, protein and fibre	Letter sent
22	Layers mash	Requires statement of oil, protein and fibre	Formal repeat sample taken—statement supplied.
28	Complete garden fertiliser	High nitrogen. Low sol. P_2O_5	Verbal warning given
29	Vitax DS	High insol. P_2O_5 . Reversion of phosphate	Repeat sample taken
33	Layers mash	Requires statement of oil, protein and fibre	Retailer visited. Old stock and no more available.
34	Grower's pellets	" " " " " " " "	Understood to be no longer on market
35	Layer's pellets	" " " " " " " "	Letter and extract of Act sent
36	Middlings	" " " " " " " "	" " " " " " " "
37	Feeding meal	" " " " " " " "	Letter and copy sent
41	Chrysanthemum fertiliser	Potash low. Required statement of sol. P_2O_5	" " " " " " " "
43	Bone meal	P_2O_5 outside limits. Nitrogen in excess	Copy of report and letter sent
44	Spate General Fertiliser	Sol. P_2O_5 and Nitrogen slightly high. K_2O low	" " " " " " " "
49	Complete garden fertiliser	Sol. and insol. P_2O_5 outside limits.	" " " " " " " "
52	Bone meal	Some reversion of P_2O_5	Not to prejudice of purchaser. No action
53	National Growmore	No statutory statement supplied	Letter sent
54	Joncross	Some reversion of phosphate	Not to prejudice of purchaser. No action
55	Bone meal	Potash slightly high	" " " " " " " "
56	Joncross	Required statutory statement	Letter sent
59	Sulphate of potash	Potash slightly high	Not to prejudice of purchaser. No action
60	Bone meal	Practically pure sulphate. K_2O under-declared	Copy of report and letter sent
		High P_2O_5	Not to prejudice of purchaser. No action

Table 9—(continued)

<i>Serial No. F. & F.</i>	<i>Article</i>	<i>Nature of Irregularity</i>	<i>Observations</i>
62	Feeding meal and bone meal	Required statement of P_2O_5	Copy of report and letter sent
65	Garden lime	Statement inaccurate	" " " " "
66	Layers mash	Oil low by approved method. Found 3.25 by alternative method. Fibre given as a range	" " " " "
67	Tomato fertiliser	Excess K_2O . Excess insol. P_2O_5	Manufacturing firm now in liquidation. No action
84	Clays Chrysanthemum Fertiliser	Nitrogen high, potash low	Letter sent to manufacturers and F. & F. Inspector, Essex C.C. Repeat taken
86	Spate General Fertiliser	High nitrogen and sol. phosphoric acid	Copy report sent to retailer, but no serious prejudice
90	Bone meal	No statutory statement provided	Letter and copy of regulations sent
93	Growmore Fertiliser	Insol. phosphoric acid slightly high	No action—no prejudice
104	Joncross	Phosphoric acid and potash high	Producer now ceased manufacturing
107	Intensive Layers Mash	Excessive fibre	Copy report sent to producers
110	Clays Fertiliser	Potash high	No action. Not to prejudice
111	Clays Chrysanthemum Fertiliser	Insol. phosphoric acid high	" " " " "
112	Seamus General Fertiliser	Nitrogen, insol. phosphoric acid and potash all excessive	Copy report sent to producer
115	Blood and bone compound	Soluble P_2O_5 in excess	Copy of report sent to manufacturer
116	Tomato top dressing	Considerable excess of K_2O	" " " " "
124	Bone meal	No statutory statement provided	Copy of report and letter sent to retailer
132	Garden lime	" " " "	" " " " "
133	Chrysanthemum Fertiliser	Some reversion of phosphate	No prejudice to purchaser. No action
134	Bone meal	No statutory statement provided	Letter sent to retailer
147	National Growmore	High K_2O	Not to prejudice of purchaser. Copy of report sent
151	Feeding meat and bone meal	Required statement of phosphate. Deficient in oil	Copy of report and letter sent to manufacturer

PART III. WATER AND SEWAGE ANALYSES

Table 10

City water from tap at Canynge Hall	26
City water from Pumping Station, Knowle	12
Downend Homes and Frenchay Hospital (West Gloucester supply)	25
Wells and springs	5
Seepage, sewage effluents and streams	22
Ships in port	10
City mains supply (private houses, etc.)	7
Council House (heating system)	36
Floating harbour	6
Swimming bath waters	165
Miscellaneous	7
	<hr/> 321 <hr/>

Table II

	<i>Bristol supply</i>		<i>West Gloucester Supply</i>
	<i>Tap at Canynge Hall</i>	<i>Tap at Jubilee Rd., Knowle</i>	<i>Tap at Downend and Frenchay</i>
Number of samples ..	26	12	25
	<i>Parts per million</i>		
Total solids	256	135	359
Mineral matter	222	105	332
Loss on ignition	34	30	27
Chlorine as chlorides	12	14	38
Nitrate nitrogen	1.21	1.40	0.38
Free ammonia	0.03	0.06	0.01
Albuminoid ammonia	0.03	0.06	0.01
Total hardness	220	84	229
Permanent hardness	46	43	38
pH	7.7	8.4	7.5

Five samples from mains supply, four from ships in port and four samples of well water gave evidence of contamination from a chemical or bacteriological point of view.

There was an appreciable increase in the number of swimming bath samples, caused primarily by an investigation at the Shirehampton Baths following a complaint concerning the effect of the water on the eyes and mucosa. Changes in alkali treatment had caused an undesirable pH drift towards acidity. Upon resumption with soda ash the pH was corrected and there were no further complaints.

The 36 samples from the Council House heating system cover 6 months operation of the plant. Heating is, of course, only necessary during the months of October to March. Following upon the comment made in the 1956 Report, the sodium sulphite is now put into the system with a hypochlorinator unit and this has without doubt resulted in a more efficient mixing. The whole object is to control the oxygen evolved in the heating process since this gas can have very serious effects in the piping of the system and may eventually cause severe pitting and actual perforation. Sodium sulphite is the easiest and most effective means of securing such control. The mean dissolved oxygen in the 36 samples was 0.19 p.p.m. The sulphite residual has varied from nil to 28 p.p.m. and efforts are now being directed to maintaining a constant sulphite residual of the order of 30 p.p.m.

Chlorination Report

Owing to the prevailing weather, the condition of the River Avon gave rise to anxiety late in May. The river treatment plant at Ashton Swing Bridge was manned and ran continuously from the beginning of June until September.

The effect of this river treatment was rather more local than had been hoped and in an attempt to improve conditions in the upper reaches, a temporary station was installed at St. Anne's Board Mills Store site at Whitby Road.

The treatment of the upper tidal reach proved most effective and there is a very strong case for a more permanent installation in that section of the river.

During early June the Floating Harbour gave evidence of septicity and analyses showed the water to be considerably worse than the Royal Commission standard for sewage effluent and almost devoid of oxygen.

A chlorination plant was set up in a barge and the installation was tested and held in readiness for use if conditions should deteriorate.

General Sewage Treatment

The general sewage chlorination was reduced to some extent. All major sewage flows were treated at one station only, and the chlorine which would have been used at the booster stations was used more effectively in river treatment.

Whitchurch Valley

An emergency chlorination station was set up near Whitchurch, to treat the sewage flow in the stream consequent to the collapse of the Whitchurch Valley sewer. This station gradually developed into a miniature sewage treatment works, with screens, primary settlement pool flocculation with alum and soda, final settlement pool, a sludge pump, and sludge drying beds. The stream then consisted of a safe and reasonably clear final effluent which was free from offence.

PART IV. RAG FLOCK ACT

Fifty-seven informal samples were tested as prescribed by the 1913 Regulations coupled with microscopic examination for the type of fibre, etc., involved. Where the chloride standard was relevant all samples complied. The general situation regarding the Regulations made under the *Rag Flock and Other Filling Materials Act, 1951* remains the same. The laboratory is still not equipped with the apparatus required to be used in the Regulations, and perhaps what is more important, the accommodation problem is so acute in Canynge Hall that even if the apparatus was purchased we should be hard pressed to find room for its installation.

PART V. PHARMACY AND POISONS ACT

Thirty-one samples were submitted under this Act and the following summarised comment was made:

P. and P.1 Spirits of Salts.—36 per cent w/w of HCl. A commonly used poison with sales restricted to the registered premises of listed or authorised sellers. The label should carry the words "Hydrochloric Acid" and might usefully carry a non-obligatory warning "Open with care," and "Beware of Vapour."

P. and P.2 Formaldehyde, P. and P.3 Solution of Formaldehyde.—Both of satisfactory strength and appropriate labelling.

P. and P.4 Kymol.—This product carried the second description Liquor Cresolis Saponatus B.P., i.e., Lysol, but made claims that it was nearly twice the germicidal strength of ordinary Lysol and also that it was "Super Lysol." Neither claim could be substantiated since the article was the B.P. Liquor. The company concerned stated that they had ceased to market the product some time ago and had no intention of remarketing. Stocks will therefore gradually disappear.

P. and P.5 Kettle De-Scaler.—65 per cent formic acid which is not scheduled in the Poisons List, but appears in Part II of the Schedule to the *Petroleum (Inflammable Liquids and other Dangerous Substances) Order, 1957*, which is concerned with the transport of such substances. It was thought that the label might give more prominence to the dangers of handling this product.

P. and P.6 San Izal Disinfectant.—11 per cent phenols and therefore a Part II poison which should only be sold by a listed seller.

P. and P.7 Nicotine Dusting Powder.—0.2 per cent nicotine. No register entry required if intended for agricultural or horticultural purposes, but should only be sold by a listed seller.

P. and P.8 Blue Toner, P. and P.9 Blue Toner.—Photographic preparations containing the stated amounts of metallic oxalates and satisfactorily labelled.

P. and P.10 Soot Destroyer.—Approximately 50 per cent salt, 20 per cent sodium chlorate and 30 per cent sawdust. Sodium chlorate is a powerful oxidising agent. It is not within the purview of the Pharmacy and Poisons Act but is subject to transportation restrictions under the *Petroleum Order, 1957*.

P. and P.11 Golden Eye Ointment, P. and P.12 Golden Eye Ointment.—Satisfactory in respect of labelling and of mercuric oxide content.

P. and P.13 Disinfectant.—6.5 per cent xlenol and free from restrictions under the Act.

P. and P.14 Ant Killer.—Stated to contain dieldrin and pyrethamus as active constituents. No actual chemical analysis possible.

P. and P.15 Slug Killer.—Sample found to be infested with moth larvae. The bran in this article was primarily attacked.

P. and P.16 Derris Powder.—Rotenone the active principle of derris shown to be present by its absorption spectrum. Not subject to control under the Pharmacy and Poisons Act.

P. and P.17 Weed Killer.—48.5 per cent phenols v/v against a declared 55 to 58 per cent.

P. and P.18 Slug Killer Pellets.—Contained bran and metaldehyde. Metaldehyde slug baits are free from poison restrictions.

P. and P.19 Disinfecting Fluid.—29 per cent phenols v/v against a declared 31 per cent.

P. and P.20 Lysol.—Of satisfactory composition at 47.2 per cent v/v cresols.

P. and P.21 Lawn Weed Killer.—Contained approximately 19 per cent of an aryloxyacetic acid, one of the selective weed killers, and free of restriction on its sale.

P. and P.22 Weed Killer.—See 17 above. This sample contained 60.3 per cent phenol and was satisfactory.

P. and P.23 Kettle Scale Remover.—50 per cent formic acid. See remarks on P. and P.5 above.

P. and P.24 Disinfecting Fluid.—A typical pine disinfectant free from restriction on sale.

P. and P.25 Metaldehyde Powder.—Pure metaldehyde. The product is controlled under the Crop Protection Products Approval Scheme and the metal container carried printed statements that metaldehyde acts as a poison if eaten and that it must be kept away from foodstuffs.

P. and P.26 Germicidal Soap.—Satisfactorily labelled and contained the stated amount of mercuric iodide.

P. and P.27 Kettle Descaler.—Found to contain 78 per cent v/v formic acid. Declared at approximately 70 per cent. The article was labelled as a poison and this is the first indication that due respect and attention was being given to strong solutions of formic acid. See also P. and P.5 and P. and P.23 wherein attention was drawn to the dangerous character of formic acid.

P. and P.28 Dusting Powder for Infants.—15 per cent boric acid with chalk and starch. It is of interest to note that this product was marked "Poison" probably in view of the toxicity of boric acid by absorption if applied to open wounds. Because of this known toxicity boric acid dusting powders and ointments will probably cease to be used.

P. and P.29 Iron Mould Remover.—Contained 5.4 per cent of hydrofluoric acid against a declared 5 per cent. The label was satisfactory.

P. and P. 30 Anaesthetic Antiseptic Ointment.—Contained the correct amount of the stated ingredients zinc oxide, resorcin and benzocaine.

P. and P.31 Cloudy Lavender Ammonia.—Labelling satisfactory. Contained 9.7 per cent w/w of ammonia against a declared 10 per cent.

PART VI. MISCELLANEOUS ANALYSES

Table 12

General

1. General examinations	72
2. Biochemical and Toxicological (mainly for Regional Hospitals)	50
3. Foreign bodies and infestation	83
4. Gloucester County	75
5. Gloucester City	1
6. Zinc and fluorine—atmospheric pollution	24

Bristol Corporation Departments

7. Central Purchasing and Town Clerk's Departments	29
8. City Engineer	65
9. Port Health Office	402
10. Education	1
11. Baths	1
12. Fire Brigade	3
13. Port of Bristol Authority	3
14. City Architect	14
15. Transport and Cleansing	3
16. Housing	5
17. Welfare Services	1
18. Rat Repression	1
19. Public Health (District Inspectors)	30

University Departments

20. Bacteriology	9
21. Physics	1
22. Pathology	2

1.—General

Seventy-two examinations classified under this heading included the usual miscellany and the following brief notes are given as illustrating the more interesting of the items.

Some potatoes found to be on sale to members of the public at a very cheap price were dyed with methyl violet. This dye is used to treat poor quality potatoes for stock feeding purposes. They are supposed to be sold for that purpose only but certain unscrupulous dealers have been "cashing in" on a very cheaply purchased article, making quite large profits and quick returns in various country markets. These gentry apparently move rapidly and the police have found some difficulty in tracking sources and distribution centres.

Samples of dried onion indicated the presence of between 700 and 800 p.p.m. of sulphur dioxide preservative. In view of the permissible limits of SO_2 in various other dried vegetables I would not regard the amount as undesirable or excessive. Nevertheless there exists a technical offence inasmuch as dried onions are not included in the list of articles permitted to contain preservative. I am inclined to think this is an error of omission on the part of the Ministry possibly because sales of dried onion are very limited although the article is useful in canteens.

Stewed rhubarb was found to contain aluminium equivalent to 65 p.p.m. derived from a pan in which it was cooked. The rhubarb had an astringent taste but more important was the fact that rhubarb leaves had been included in the preparation and it is well known that oxalic acid is present in the leaves. The unpleasant taste had fortunately deterred consumers.

A shortening containing 10 per cent of butter was checked for butterfat and water. It was confirmed that something of the order of 10 per cent butter was present, but somewhat surprisingly, instead of finding some 1.5 per cent water as might be expected from the incorporation of this amount of butter, only some 0.3 per cent was present. This would suggest that water must be lost in the process of mixing the fats, presumably by melting.

A pig meal was found to contain a normal amount of salt, 0.7 per cent. Anything above 4 per cent is undesirable in a pig food.

The British Flour Millers Research Association very kindly supplied a sample of untreated flour against which we were able to check the statutory additions to flour as now required by the *Flour Order, 1956*.

A number of rinse waters from a bottle washing plant were checked for caustic soda content at varying times of the day, together with bulk supplies of soda used in preparing the rinse water. Recalculations and better methods of preparation brought improvement in the cleanliness of the bottles.

A melon and ginger jam, canned, was found to be badly blown. A considerable quantity of carbon dioxide was collected from the can and the cause of the fault was the presence of active yeasts.

2.—Biochemical and Toxicological

The 50 specimens came principally from Regional Hospitals and concerned primarily bloods and urines for examination for lead or mercury and occasionally for copper and selenium.

The blood of one child gave a copper figure of 2.5 p.p.m. which is just about the normally accepted maximum.

A batch of urines from a local works were tested for mercury. The 5 workers under observation gave mercury in urine figures of 30 to 350 micrograms per litre. The critical range is about 100 to 200 micrograms per litre with definite symptoms of mercurial poisoning at 300 micrograms per litre.

A urine examined for selenium showed the presence of 2.55 p.p.m., a figure certainly indicating exposure but not at a toxic level.

A number of copper estimations on powdered bones of dogs (see 1956 Report) was conducted to assist a research project at the Bristol General Hospital.

Two samples of tablets from the Snowdon Road Hospital were shown to be both 5-grain tablets of sulphadimidine. The only difference appeared to be in the rates at which the tablets disintegrated.

A number of specimens of urine and stomach washings from a patient admitted to hospital in a profound coma were examined. Traces of a barbiturate were found and the urine gave definite reactions for chloral. At one juncture it appeared that two barbiturates might have been taken. The patient subsequently recovered and investigation appeared to indicate that only phenobarbitone was involved although the long period of coma, some days, would not have suggested the single drug.

The urine from a child gave 65 micrograms of mercury per litre. The authorities give 100 to 200 micrograms per litre as the critical concentration (Monier Williams) and 80 micrograms per litre as normal with anything in excess of 100 micrograms per litre as abnormal (Prof. Lane).

A milk submitted from the Bristol Mental Hospital was found to contain some 1.7 per cent of sodium sulphate, probably added as Glauber's salt. Just how this had occurred was never ascertained.

Two fluids were submitted from Frenchay Hospital, one alleged to be dextrose saline and the second the normal stock of industrial methylated spirit. Tests showed that the alleged saline was, in fact, methylated spirit, identical in characteristics with the normal stock of that fluid.

A urine submitted by the Burden Neurological Institute contained in a 24-hour specimen the equivalent of 1.5 grains of pentobarbitone. It was alleged that carbital had been ingested and the amount of the barbiturate found could have represented a 5.5 grain tablet of carbital. Carbital consists of 1.5 grains pentobarbitone and 4.0 grains of carbromal. The search for carbromal was analytically unsuccessful.

3.—Foreign Bodies in Foods, etc., including Infestation and Identification of Insects

Eighty-three specimens were submitted in this category, the number of which seems to increase every year. Most of the complaints were lodged by members of the public and the number is certainly indicative of the increasing concern and consciousness in regard to clean food. Where action was desirable most cases were dealt with by Inspectors' visits or warning letters, and as in previous years, there was again a commendable willingness to co-operate in tracing the cause of the complaint and to effect a remedy. In only a few cases was legal action considered necessary. The full list of specimens is appended.

Table 13

Laboratory No.	Article	Comment
M. 8	Glucose stout	Very acid
9	Glucose stout	Yeasts present in excess
10	Glucose stout	Yeasts present in excess
41	Almond cake	Probably grit from fruit
46	Sliced wrapped loaf	Portion of charred dough
63	Neapolitan slices	Contained a copper coated staple. May have been cooked in the confection
74	Christmas cake	No excessive grittiness
75	Christmas pudding	No excessive grittiness
89	Turkish delight	One piece contained a mutilated body of the common wasp
91	Wrapped sliced loaf	Soiled dough
100	Milk bottle	Milk residues and coal dust
101	Cornflakes	Not a maggot, but a broken-off grain
123	Milk chocolate	One live and one dead grub of cocoa moth
131	Whole-meal bread	A portion of dried fruit
142	Chocolate	Definite signs of attack, webbing, excreta and larva of cocoa moth (<i>Ephestia Elutella</i>)
170	Humbug sweets	Fragments of glass
174	Kidney soup (canned)	Several pieces of plaster
185	Milk	Bottle contained oxidised linseed oil (linoxyn)
201	Pineapple slices (canned)	A lizard (the gecko)
279	Larvae	Clothes moth
327	String (dyed cotton fibre)	Flour or soft bag string
328	Crabmeat	Alleged glass was struvite, magnesium ammonium phosphate
336	Jar of jam	Cigarette end
353	Bread	Clear glass of convex shape probably from an electric lamp
369	Biscuit	2-inch bristle from a brush
381	Tart	Foreign body—not a finger-nail but a carpel from apple core
383	Spinach and margarine	0.46 per cent silica
406	Spinach	0.03 per cent silica
433	Empty milk bottle	White particles due to milk curd
434	Milk bottle	Mould growth and milk residues
447	Senna pods	Mould growth—Tinnevely pods possibly more susceptible
454	Slices of brown bread	Piece of insulating tape
475	Insect in bread	Remains of moth (female ghost moth)
485	Insects	Mainly <i>Ptinus Tectus</i> with some furniture beetles
493	Fungus	<i>Merulius lachrymans</i>
494	Fungus	<i>Merulius lachrymans</i>
495	Piece of metal	Twisted with piece of fish (not bread) adhering
496	Bread	Soiled dough
497	Insect	Foreign species of grasshopper
515	Milk	Mould growth
542	Chocolate éclair	Mould growth
549	Bread	"Rope"— <i>B. Mesentericus</i>
554	Ice cream pack	Black rubber ring—a washer or gasket
575	Bread	Cleaning rag and oil
589	Wrapped bread	Piece of cardboard
594	Milk bottle	Algal growth
595	Poached egg (foreign body?)	Chalaza of egg
596	Dried fruit	Infested
597	Dried fruit	Infested
598	Dried fruit	Infested
606	Loaf	Yellow area due to Tartrazine—a permitted colour

Table 13 (continued)

Laboratory No.	Article			Comment
607	Milk bottle	..	..	Dirt and milk residues—No detergent
621	Larvae	..	..	<i>Ephestia Elutella</i> , heavy infestation of dried currants—destroyed 60 lb. of currants
628	Pork pie	..	..	Partially charred currant, not excreta
629	Pork pie	..	..	Extraneous dirt, siliceous matter and hairs
632	Deposit (submitted on photographic film)			Unicellular brown algae (<i>Phaeophyceae</i>)
640	Sweet	..	..	Remains of an ant
642	Bread	..	..	Soiled dough
647	Milk bottle	..	..	Milk residues only
652	Vinegar	..	..	<i>Bacillus xylinum</i> (mother of vinegar)
683	Canned raspberries	..	..	2 wasps, 1 larva, 1 piece of wood
685	Packet of sugar	..	..	Packet—cat urine—sugar only slightly contaminated
689	Bottle of milk	..	..	Mould growth
706	Meringue	..	..	Soiled farinaceous matter with silica and hairs
709	Bottle of milk	..	..	Chip in neck but no glass in milk
711	Currants	..	..	Webbing and excreta
729	Loaf of bread	..	..	Burnt crust on side of bread
757	Loaf of bread	..	..	Soiled dough
759	Sponge cakes	..	..	Embedded hover fly
814	Paper bag in sugar	..	..	Tissue paper
815	Granulated sugar	..	..
817	Ginger beer essence	..	..	Some sediment
818	Ginger beer	..	..	Black specks—fragments from the disintegrating and worn stoppers—also some sediment from the essence
819	Ginger beer	..	..
820	Ginger beer	..	..
821	Ginger beer	..	..
822	Ginger beer	..	..
823	Ginger beer	..	..
824	Ginger beer	..	..
825	Cottage loaf roll	..	..	$\frac{1}{2}$ in. square of grease-proof paper
831	1-pint milk bottle	..	..	0.7 grain of glass fragments
839	Bread roll	..	..	Soiled partially cooked dough
840	Loaf of bread	..	..	External patch due to embedded dirt

4.—Gloucester County

The samples examined during the year for the County Authority showed the same variety as those from the City. The list is given under the Report to the County. The major items were 11 ice creams, 10 sewage samples which were examined for the presence of chromium only, and 19 general food-stuffs which were inspected rather than analysed. Three samples of paper were of interest regarding weights, sizes and thickness of paper, and our thanks are due to the City's Printing and Stationery Department for help and some very useful information.

5.—Gloucester City

Only one sample was submitted by the Authority. This was a barrier cream intended for use in food industry and an opinion was required on the general use of such creams and the desirability for extensive use by personnel handling foods.

6.—Atmospheric Pollution

The survey in the Avonmouth area has been conducted on special lines for some years. The collected rain water in the deposit gauge is used to determine

the total zinc and fluorine compounds entrained by rain each month at the Avonmouth Docks site, and a second site in the area. For several years this second location has been at T. Farm, but was changed in May to Barracks Lane. The range of the depositions are given briefly.

	<i>Avonmouth</i>	<i>T. Farm 4 months</i>	<i>Barracks Lane 8 months</i>
Zinc tons/sq. mile. . . .	0.04 to 0.55	0.02 to 0.07	0.006 to 0.05
Fluorine tons/sq. mile . .	0.03 to 0.14	0.02 to 0.03	0.008 to 0.03

These figures are very similar to the 1956 data and would indicate a measure of stability on the depositions of zinc and fluorine in the area.

7.—*Town Clerk's Department and the Central Purchasing Department*

The 29 samples submitted related mainly to goods intended to be purchased under contract and included soaps and soap powder detergents, emulsion polishes, paints and scouring powders. Few of the articles could be set against actual specifications and much of the work was concerned with comparisons of various similar commodities with an assessment of the merits of the contract goods with respect to price. A floor polish supplied against a specification drawn up by the laboratory was generally satisfactory although some reduction of the saponifiable waxes had been made.

8.—*City Engineer's Department*

The majority of the 65 samples submitted were soils taken from boreholes at various levels in connection with new building projects. The main interest was in the sulphate content and pH value in relation to possible attack upon cement work. The problem is a continuing one investigated now for several years on behalf of the Engineer. It is of interest to note that several samples did contain excessive amounts of sulphates and, in several instances, the soils submitted contained recognisable conglomerates of calcium sulphate crystals.

A sludge and a liquid from a sewer contained a significant amount of kerosene and another sewage contained traces of naphtha.

The Netham Tip, due for conversion to playing fields, continues to interest us and again several analyses were made on borehole samples.

9.—*Port Health Office*

Nearly half of miscellaneous samples are submitted by the Port Office, and chemical examination coupled with inspection at the Docks provides for satisfactory cover of incoming foodstuffs.

The principal items were canned goods of many varieties and from all parts of the world, butter and fresh oranges, teas, dried fruits, margarine, butter, milk powder, rice, mixed peel, butter and apricot pulp.

No evidence of thiourea was found in any of the samples of oranges, neither was there any evidence of waxing, mineral oil or boric acid.

Samples of Assam tea were found to be contaminated with extraneous oil.

A consignment of sultanas was found to contain excess of sulphite of the order of 1,000 p.p.m. and more. Dilution with sulphite-free sultanas very effectively reduced the sulphur to permitted amounts.

The majority of canned goods were in excellent condition and free from undue contamination by tin and lead. Italian canned tomatoes, tomato juice and purees continue to warrant either rejection or early disposal. The faults

were mainly "blowing" and excess of tin. One batch of tomatoes containing 3 grains and more of tin were recommended for dilution and conversion to other tomato products provided bacteriological findings were satisfactory.

Norwegian peeled and canned shrimps presented some trouble. Cans were found to have suffered breakdown of internal lacquering and the tin content of the shrimps was some 3 grains per lb. The shrimps had in many cases become unsightly and certainly looked unpalatable.

Some pears in syrup were badly blown and had undergone alcoholic fermentation of the syrup.

Several samples of rice prepacked in cartons were examined for contamination by cresols. The worst of these contained some 2,000 p.p.m. of cresol falling to some 5 p.p.m. It was found possible to detect by smell about 10 p.p.m. It was considered that the cresol being retentively held by the rice there was little hope of salvage and the contaminated consignment was condemned as unfit for either human or animal consumption.

Mixed peel and dried citrous peel contained somewhat excessive amounts of sulphur dioxide of the order of 200 to 250 p.p.m. against the permissible maximum of 100 p.p.m.

Canned apricot pulp showed signs of deterioration and from one can a number of minute fragments of metal were collected. It is conceivable that these fragments might have been derived from pulping machinery, but examination of several other cans failed to indicate any further metal.

10.—District Public Health Inspectors' Samples

Thirty specimens were submitted and included insects for identification and foods for assessment of condition. The following represents typical comment or action.

Laboratory No.	Article				Comment
DSI. 1	Three beetles	..	..	..	<i>Attagenus pelli</i>
2	Beetles	..	..	..	<i>Attagenus pelli</i>
3	Cockles in vinegar	..	..	..	Fish broken down and of offensive smell. Unfit for consumption
5	Minced pork	..	..	}	Faults in type of pack allowing air to enter and making it difficult to maintain a vacuum
6	Minced pork	..	..
7	Minced pork	..	..
8	Insects	..	..	..	Beetles and larvae. Beetles were <i>Stegobium paniceum</i> . Larvae of <i>Anthrenocerus australis</i>
12	Insects	..	..	..	<i>Ptinus tectus</i>
13	Insects	..	..	..	Lathrid or plaster beetles
14	Insects	..	..	..	<i>Tenebrio molitor</i> or yellow mealworm
15	Poached hen's egg	..	..	..	Thin cream-coloured thread 2 in. long found to be the chalaza of the egg
16	Fleas	..	..	..	Cat or dog flea
17	Insects	..	..	..	<i>Ptinus tectus</i>
18	Fleas	..	..	..	Cat or dog flea
19	Prunes and currants	..	..	..	<i>Ephestia</i>
20	Beetle	..	..	..	Devil's Coach Horse (<i>Ocyrops olens</i>)
21 to 29	Mixed peel	..	..	..	Sulphur dioxide ranging from 150 to 230 p.p.m. (limit 100 p.p.m.)

PART VII. REPORT ON WORK FOR THE COUNTY OF GLOUCESTER

This is the sixth annual report on the work done for the County consequent upon the agreement of 1951. Again the bulk of the samples relate to Foods, Drugs, Waters and Feeding Stuff, but there was a significant increase in the miscellaneous samples examined and this indicates the value of the Department in giving an analytical and consulting service outside the normal field of the Analyst's work.

Table 14—Summary of Examinations

Milk	722
Food and drugs	523
Waters	105
Fertilisers and feeding stuffs	74
Miscellaneous	73
Merchandise Marks Act	1
Poisons and pharmacy	2
Atmospheric pollution—	
Lead peroxide	66
Deposit gauges	60
	<hr/> 1,626 <hr/>

Food and Drugs Act

There was no major change in the level of food and drug sampling. The number of milks again represents some 60 per cent of the total samples.

Thirty-nine milks were returned as adulterated and of these 9 were formal samples. Thirty-one samples showed deficiencies in fat and 5 of these were also abnormal in solids-not-fat. Eight samples contained added water.

Comment was made on the following irregular samples (other than milk).

B.2086	Balsam of aniseed ..	Formal	Deficient in acetic acid as compared with stated amount. Follow-up sample to B.2012 of June quarter.
B.2012	Balsam of aniseed ..	Informal	Only 1·9 per cent acetic acid against declared 6·6 per cent.

Table 15—Other Milks Requiring Comment

	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	Total
Abnormal solids not fat	18	10	10	5	43
Channel Islands satisfactory	20	11	30	22	83
Channel Islands unsatisfactory	—	1	4	—	5
Channel Island poor quality	—	—	—	—	—
Appeal to cow samples	*9	—	—	—	9
Poor quality. Fat below 3·0 per cent. ..	1	2	2	1	6
Suspicious. Low N.F.S. and freezing point depression less than 0·530°C. ..	1	—	—	—	1

** of which two were abnormal N.F.S.*

Thus of 722 milks examined, 43 were abnormal in respect of solids-not-fat, that is, they gave figures below 8·5 per cent, but the freezing point did not indicate added water. Eighty-three Channel Island milks were satisfactorily above the 4 per cent minimal fat requirement, whilst 5 were deficient in fat. Of the 9 appeal to cow samples, two had abnormal solids-not-fat.

Table 16—Other Food and Drugs Requiring Comment

No.	Commodity	F or I	Nature of Deficiency or Irregularity
A. 1643	Milk flavouring syrup	Informal	Comment on contents and the presence of mould growth
A. 1708	Tomato paste	„	Tin equivalent to 3.5 grains per pound
B. 1846	Ground nutmeg	„	Mould growth present
B. 1876	Horseradish relish	„	Old stock. List of ingredients included "synthetic cream"
B. 1877	Milk flavouring syrup	„	Similar to A. 1643 above. Also had mould growth
B. 1911	Lard	„	Contained 1.0 per cent of water
C. 1818	Cake	„	Contained a spiral of metal
C. 1825	Halibut oil	„	Some loss of vitamin A potency
C. 1851	Orange pie filling	„	Contained orange oil. Orange flavour would be a better description
C. 1882	Bread	„	Contained a portion of a beetle
B. 1976	Orange milk flavouring syrup	„	} These samples had mould growth
B. 1977	Orange milk flavouring syrup	„	
C. 1993	Milk	„	
B. 2012	Balsam of aniseed	„	Only 1.9 per cent acetic acid against the declared 6.6 per cent
A. 1830	Sausage	„	Type not stated but calculated as beef gave only 45 per cent meat and must be regarded as of poor quality

B.2090 Canned tomato juice, informal, required comment on a somewhat excessive tin content at 340 p.p.m. The Food Standards Committee of the Ministry of Agriculture Fisheries and Food, recommended a maximum of 250 p.p.m. *Report on Tin in Foods, 1953*. The Committee also stated that until more decisive evidence was available on the subject of the toxicity of tin, it was not proposed to give statutory effect to the proposed limit.

As a result of a letter received by the Clerk of the Council from the Ministry of Agriculture, Fisheries and Food, a sample of a non-alcoholic port-flavour beverage was procured. A question had been asked in the House of Commons as to whether in view of the fact that the contents have the smell and taste of pear drops and have no resemblance in either sense to port, the Minister will consider taking action in the matter under Section 6 of the *Food and Drugs Act*. The offending article was apparently sold in the Cirencester branch of a multiple store.

The following comment was made on *A.1995*

Non-alcoholic Port Flavouring Beverage:

"This sample consists of a dilute syrup containing about 10 per cent of sugar and has a slight acidity of approximately 0.4 per cent calculated as acetic acid. As stated it contains no alcohol. It is conceded that the flavour bears little, if any, resemblance to true port, but the esters used are presumably the best attempt the firm could make in achieving a "port flavour." Amyl acetate, which gives a pear drop odour, may well be one of the esters used in formulating the "flavour," but the amounts used, and required, are so small as to be chemically undetectable unless quite impossible volumes of the beverage were available. Even then separation of the probably sized esters would be exceedingly difficult.

"I am of the opinion that the product is what it purports to be—a non-alcoholic beverage of port *flavour*. Indeed at less than 2s. per bottle it is difficult to see how a purchaser might be prejudiced since to my knowledge it is impossible to define a true port flavour. I would not recommend any action by the County Council against this product."

A.2042, a Milk Bottle containing a Foreign Body. The following comment was made:

"The foreign body found in this one-third-pint milk bottle was confirmed as a curved piece of glass $1\frac{1}{2}$ in. long and $\frac{3}{4}$ in. at the widest point. The curvature and appearance of the fragment compared closely with the neck of the milk bottle itself which was found to be intact. Owing to its size it was not easy to remove from the bottle, a fact which may help to explain its retention during the washing process."

A survey of nine informal samples of sausage gave the following information:

C. 2219	Pork	Meat content	72 per cent	Satisfactory
C. 2220	Beef	" "	56 " "	"
C. 2221	Pork	" "	65 " "	"
C. 2222	"	" "	62 " "	Poor quality
C. 2223	Beef	" "	70 " "	Satisfactory
C. 2224	"	" "	60 " "	"
C. 2225	Pork	" "	62 " "	Poor quality
C. 2226	Beef	" "	65 " "	Satisfactory
C. 2227	Pork	" "	59 " "	Poor quality

The assessments of quality are made against the immediate post-war standards of 50 per cent meat as a minimum in beef sausages, and 65 per cent meat as a minimum in pork sausages.

Table 17—Water Effluents, etc.

Wells, springs and boreholes	..	..	28
Mains and private piped supplies	..	..	42
Swimming pools	..	..	9
Sewage effluents and streams	..	..	17
Miscellaneous	..	..	9
			<hr/> 105 <hr/>

Seventy samples of drinking water were submitted. Forty-one were satisfactory. The remainder showed evidence of contamination or pollution as the result of chemical or bacteriological tests.

Ten of the above samples were part of a geological survey required by the Ministry of Housing and Local Government and involved a mineral analysis in each case in addition to the routine tests normally carried out. The estimation of fluorine was particularly required and the highest amount found was 0.18 part per million. Three samples gave negative results.

Table 18—Pharmacy and Poisons Act

P. & P.3	Kettle Descaler	Informal	This preparation consisted of approximately 80.5 per cent w/v formic acid, probably in tap water. Formic acid does not at present appear in the Poisons List, but being a strong acid it should be handled with care.
P. & P.4	Kettle Scale Remover	"	This preparation consisted of approximately 46.0 per cent w/v formic acid, probably in tap water. Formic acid does not at present appear in the Poisons List, but being a strong acid it should be handled with care.

Merchandise Marks Act

M. & M. Act 1	Distilled water	Informal	This sample was shown to have the characteristics of normal distilled water
---------------	-----------------	----------	---

Table 19—Summary of Fertilisers and Feeding Stuffs

			<i>Formal</i>	<i>Informal</i>
Feeding Stuffs	..	..	27	19
Fertilisers	..	..	16	12

Comment was made on—

<i>Serial No. F & F</i>	<i>Article</i>	<i>F or I</i>	<i>Observations</i>
818	Growing Mash	Formal	Slight excess of oil at 3.45 per cent (limits of variation 1.75 to 3.25 per cent)
670	Superphosphate	Informal	Requires a statement on the soluble phosphate only
779	National Growmore	„	Slightly high soluble phosphate at 5.8 per cent (limits 4.5 to 5.5 per cent)
780	Soluble Blood Manure	„	Slightly low nitrogen figure at 12.5 per cent (limits 13.0 to 14.0 per cent)
676	General fertiliser	„	Slightly high soluble phosphate 5.9 per cent (4.5 to 5.5 per cent limits)
682	Fish manure	„	High insoluble phosphate and low potash
792	Compound fish manure	Formal	Low soluble phosphate but quoted soluble figure referred to Calcium phosphate and not to P_2O_5
797	Sulphate of potash	Informal	This was declared as containing 48.5 per cent K_2O . It was found to be practically pure potassium sulphate containing 54 per cent of K_2O . The statement warrants some revision to say 52 per cent K_2O , limits 50 to 54 per cent
798	Combined fertiliser	„	The total phosphate was satisfactory but there was some reversion of soluble phosphate. See also 800
799	Potato fertiliser	„	The total phosphate was satisfactory but there was some reversion of soluble to insoluble phosphate. See also 851
800	Combined fertiliser	Formal	The total phosphate was somewhat in excess and there was some reversion of soluble phosphate to its insoluble form. The excess phosphate and the reversion are not regarded as to the prejudice of the purchaser
851	Potato fertiliser	„	The total phosphate was satisfactory but there was some reversion of the soluble phosphate. This was not regarded as to the prejudice of the purchaser. It is very probable that the Combined Fertiliser and Potato Fertiliser had undergone changes during prolonged storage

Table 20—Miscellaneous—Including Atmospheric Pollution

Ice cream	..	..	..	..	..	..	..	11
Jam	..	..	..	..	..	..	..	1
Soil	..	..	..	..	..	..	..	1
Petroleum spirit		..	..	..	..	..	..	3
Diesel oil	..	..	..	..	..	..	..	1
Ice lolly	..	..	..	..	..	..	..	2
Milk (Channel Island)		..	..	..	..	..	..	1
Milk	..	..	..	..	..	..	..	8
Foodstuffs (inspection only)	..	..	..	..	..	..	..	19
Clay	..	..	..	..	..	..	..	1
Concrete	..	..	..	..	..	..	..	1
Steak and kidney pie	..	..	..	..	..	..	..	1
Canned beef and vegetables	..	..	..	..	..	..	..	5
Sugar	..	..	..	..	..	..	..	1
Sewage	..	..	..	..	..	..	..	10
Sub-soil water and sand		..	..	..	..	..	..	1
Canned pork luncheon meat	..	..	..	..	..	..	..	1
Dried sludge	..	..	..	..	..	..	..	2
Potato crisps	..	..	..	..	..	..	..	1
Paper	..	..	..	..	..	..	..	1
Empty milk bottle	..	..	..	..	..	..	..	1
Atmospheric Pollution	{	Lead peroxide	..	..	..	..	..	66
		Deposit gauges	..	..	..	..	..	60
								199

The pollution surveys were carried out upon the authority of the Kingswood U.D.C., Stroud U.D.C. and Dursley R.D.C.

Table 21
Foods

<i>Nature of sample</i>	<i>Total examined</i>	<i>Number adulterated or otherwise irregular</i>
Milk	722	39
Almond paste and marzipan	11	—
Apples	1	—
Arrowroot	1	—
Baking powder	3	—
Bread improver	1	—
Bread	1	—
Butter	2	—
Buttered rolls and sponge	3	—
Blancmange powder	4	—
Baked beans	2	—
Butter beans	2	—
Broad beans	1	—
Cream	3	—
Cheese, spreads and processed	10	—
Canned chicken fillets	1	—
Canned vegetables	19	—
Canned fruit	6	—
Canned fish	10	—
Canned soup and powdered	31	—
Canned peeled tomatoes and juice	8	—
Canned meat	7	—
Coffee and chicory essence	5	—
Cake and sponge mix	6	—
Condensed milk	1	—
Condensed tomato puree	1	—
Cakes	2	—
Cooking crumbs	2	—
Curry powder	2	—
Custard powder	2	—
Cornflour	2	—
Cider	3	—

<i>Nature of sample</i>	<i>Total examined</i>	<i>Number adulterated or otherwise irregular</i>
Caraway seeds	1	—
Candied peel	1	—
Chutney	1	—
Cheesesticks	1	—
Coconut, desiccated	2	—
Dripping	5	—
Dried fruit	4	—
Dried mixed herbs	1	—
Evaporated milk	3	—
Essence of Rennet	1	—
Export ale	1	—
Flavoured cornflour for blancmange	1	—
Flavoured cornflour	1	—
Flavourings and colourings	3	—
Flour, S.R.	14	—
Fat	1	—
Foie Gras paste (with truffles)	1	—
Ground nutmeg	3	—
Ground ginger	1	—
Gravy browning	4	—
Ground almonds	1	—
Ground mace	1	—
Ground mixed spice	1	—
Gluten	1	—
Ground nut oil	1	—
Horseradish relish	1	—
Ice cream	19	—
Icing sugar	3	—
Instant pudding	1	—
Instant whip	1	—
Jelly cubes, powder, cream and crystals	11	—
Lard	8	—
Lemon flavour pie filling	1	—
Lemonade crystals and powder	5	—
Liquid fruit pectin	1	—
Meat products	16	—
Milk flavouring syrup	4	—
Margarine	6	—
Milk	1	—
Milk, full cream and evaporated	2	—
Milk bottle (empty)	1	—
Mixed spice	3	—
Mussels	1	—
Mint, dried rubbed	1	—
Orange pie filling	1	—
Pickles and chutney	10	—
Pepper	9	—
Pastes, fish, meat, tomato	21	—
Preserves, jam, marmalade, mincemeat, honey	30	—
Potato crisps	1	—
Pearl barley	2	—
Perry	1	—
Pastry puff	2	—
Plum pudding	1	—
Pickling spice	1	—
Rice, ground and creamed	5	—
Ready meal	1	—
Sauces	8	—
Sweets	11	—
Suet	5	—
Soft drinks	10	—
Sausages	11	—
Soya flour	1	—
Salt	1	—
Savoury Welsh Rarebit	1	—

<i>Nature of sample</i>	<i>Total examined</i>	<i>Number adulterated or otherwise irregular</i>
Shortening	2	—
Sage	1	—
Sage, dried rubbed	1	—
Seasoning	1	—
Stuffing	5	—
Separated milk powder	1	—
Spirits	6	—
Tea	5	—
Tapioca	1	—
Tomato juice	1	—
Vinegar	5	—
Whole caraway	1	—
Wines	2	—
Yeast	1	—
Total	1,182	39

Drugs

Aspirin tablets	3	—
Acid calcium phosphate	1	—
Bi-carbonate of soda	2	—
Blackcurrant juice syrup	1	—
Baby food	1	—
Balsam of aniseed	2	2
Bronchial mixture	1	—
Calamine Lotion B.P.	1	—
Cod Liver Oil	1	—
Codeine tablets	1	—
Compound Glycerine of Thymol	2	—
Castor oil	1	—
Camphorated Oil B.P.	1	—
Compound Syrup of Figs	1	—
Compound Essence of Peppermint	1	—
Codeine linctus	2	—
Catarrh pastilles	1	—
Epsom Salt B.P.	2	—
Friars Balsam	1	—
Glycerine, Lemon and Honey with Ipecacuanha	1	—
Glycerine	2	—
Glycerine, Lemon and Ipec Mixture	1	—
Glycerine, Lemon and Ipecac	1	—
Glycerine Ipecac Balsam	1	—
Gee's Linctus	2	—
Glucose barley sugar	1	—
Glucose drink	1	—
Halibut Liver Oil and Capsules	7	—
Honey, glycerine and blackcurrant	1	—
Iron and yeast tonic tablets	1	—
Indian Tonic Water	1	—
Influenza Mixture	1	—
Insomnia tablets	1	—
Lung tonic	2	—
Liquid Paraffin B.P.	2	—
Orange Health Drink	1	—
Olive oil	6	—
Oil of Eucalyptus	1	—
Petroleum Jelly	1	—
Rose Hip Syrup	1	—
Tincture of Iodine	1	—
Total of drugs	63	2
Total of foods and milk	1,182	39
TOTAL	1,245	41

PART VII. ATMOSPHERIC POLLUTION

Table 22

	<i>Bristol</i>	<i>Gloucester County</i>	<i>Gloucester City</i>
Deposit gauges	107	60	5
Lead peroxide for sulphur	143	66	—
Phosphorus and silica	36	—	—
Zinc and fluorine	24	—	—
Smoke recordings for Port of Bristol ..	314	—	—
Smoke recordings at Laboratory ..	59	—	—
	<hr/> 683	<hr/> 126	<hr/> 5

The examinations made through the year totalled 814, or again nearly 10 per cent of the total work of the Department. A new site at St. Anne's, Bristol, was in operation throughout the year, whilst a short survey of six months for using sulphur dioxide was conducted in the Dursley area. New work also included the beginning of observations in Gloucester City with five months of deposit gauge observations. This work is likely to extend in 1959 and it is also probable that two new sites will be established in the Thornbury area for besides the National Smelting Corporation and the Carbon Black Works, in the south of the area, we shall also see the establishment of the Berkeley Power Station in 1960 and later the new I.C.I. project will be operative.

The City Survey

The five stations concerned in this survey are located at Marsh Street (City Centre), Shaftesbury Crusade (St. Philip's), the Zoological Gardens (roof of the elephant house), Blaise Castle (roof of the stables), and Wootton Road, St. Anne's (garden of private house).

It is worth while to indicate how the degree of pollution is measured, and in respect of the rain gauges, we have the D.S.I.R. approved apparatus which consists essentially of a glass collecting bowl of known area, which feeds the rainfall into a bottle of some 10 litres capacity. Very approximately a full bottle of 10 litres would represent some 5 inches of rainfall. Each apparatus is left for one month, and on or about the first of each month the rainfall is collected and a fresh 10-litre bottle placed in position. In all cases the bottle is contained in a lagged box to protect it during frost conditions. At periods of heavy rain it may be necessary to inspect each site at mid-month, or as dictated by weather conditions. Upon receipt at the laboratory, the collected rainfall is measured and examined for soluble, insoluble and tarry matters with estimations of calcium, chloride, sulphate and pH value. The Local Authority is a co-operating body of the D.S.I.R. in pollution surveys, and all results are submitted for correlation and assessment to the Director of Observations, Fuel Research Station, Greenwich.

The total deposit in the City Centre and St. Philip's areas show a decided improvement, despite a somewhat increased rainfall, over the 1955 and 1956 figures. Thus at the City Centre the calculated figure based on 156 tons in ten months would have been 187 tons (compared with 201 tons in 1956). Whilst at St. Philip's we have 180 tons in 1957 against 206 tons for eleven months of 1956.

The Zoological Gardens site remains fairly steady at 105 tons (compared with 101 tons in eleven months in 1956), and Blaise Castle also shows improvement, 93 tons (compared with 110 tons for ten months' observations in 1956).

The Blaise site shows an improved average sulphur pollution figure (1.03 to 1.09) but the City, St. Philip's and Zoo sites have all deteriorated slightly in respect of sulphur dioxide.

For example:—

	1957	1956	
City	2.24	2.03	} mgm/SO ₂ per 100 sq. cm/day
St. Philip's	2.40	2.07	
Zoo	1.05	0.88	

The newly established St. Anne's site indicated deposition conditions akin to the City Centre, 156 tons in eleven months, but there is only some half of the order of pollution by sulphur as compared with the City Centre and St. Philip's.

The data for the Kingswood site is best summarised and compared with recent years.

	1957	1956	1955	1954
Tons/sq. mile	78	109	116	183
Average SO ₂ /mgms per 100 sq. cm/day ..	1.02	1.24	1.82	0.94
Rainfall in inches	27.6	22.7	19.9	40.9

The improvement in the conditions in this area represented by both deposit gauge and sulphur dioxide data is very encouraging and one is tempted to add almost dramatic in respect of deposit.

The continuous smoke and sulphur dioxide recording apparatus was not operative at Canynge Hall until late in the year, although for a short period observations were made in Gloucester City. The observations at the port are made by port officers and the results submitted to the laboratory for inspection. It would appear that smoke filters may prove very useful in the unhappy event of heavy radioactive contamination of the atmosphere. Indeed smoke filters from various parts of the country were so used by the London County Council Laboratories after the Windscale incident.

The Avonmouth Survey

The three sites in this area are the Docks, Green Splot Farm and T. Farm. The latter site was changed as from 1st April to Barracks Lane, a slightly more accessible site and certainly less muddy to approach during the winter months than the T. Farm site. Nevertheless my thanks are due to the owners of T. Farm for their co-operation and assistance over several years. The three sites are all equipped for measurement of sulphur pollution, but only two, the Docks and Barracks Lane, are provided with deposit gauges. The rainfall collected is not examined in the conventional manner, but is used to assess the zinc and fluorine pollution in the area. The point is again made that this is not the ideal method of assessment, but nevertheless over the years we do obtain comparative data.

The sulphur pollution data for three years is as follows:

	1957	1956	1955	
Avonmouth Dock	37.5	38.7	43.1	} mgms SO ₂ /100 sq. cm. per day totalled for the year
Green Splot	21.8	14.6	15.1	
T. Farm	11.7	13.5	8.5	

The Dock pollution figure remains fairly constant, but the Green Splot figure has shown a decided deterioration. T. Farm is reasonably steady.

The total zinc deposition on the Avonmouth Dock area amounted to 2.13 tons per square mile for the year and the fluorine 0.95 tons for a total rainfall of 28.9 inches.

At T. Farm (January, February and March) and later Barracks Lane, the figures were: zinc 0.34 tons, and fluorine 0.31 tons for a total rainfall of 29.4 inches in the year.

As in previous years no attempt was made to determine the actual nature of the depositions and zinc implies zinc and its compounds, and fluorine signifies total fluoride ion principally as fluorides.

The Portishead Survey

This survey began in 1949 and has continued in recent years at the request of the Somerset County Council after the Power Station came under national control. It is now the intention of the Portishead Authority to conduct their own examinations through a Consultant Analyst and it is now agreed that this Department will cease to make measurements in the area as from 1st April, 1958. It is perhaps appropriate therefore to summarise the results obtained since measurements were first made.

<i>Deposit tons per square mile</i>						
	1949	1950	1951	1952	1953	1954
Portishead Dock ..	538.8	530.3	303.2	284.6 (10 mths)	506.8 (11 mths)	562.4
Meadow Farm ..	73.8	116.9	82.8	91.4	84.3	88.2
South Road ..	—	—	178.1 (10 mths)	214.2	237.5	214.4

	1955	1956	1957
Portishead Dock ..	471.5	552.6 (11 mths)	285.1 (11 mths)
Meadow Farm ..	79.3	73.5	63.4 (11 mths)
South Road ..	199.2	202.5 (11 mths)	166.7

<i>Rain in inches</i>									
	1949	1950	1951	1952	1953	1954	1955	1956	1957
Portishead Dock ..	26.0	35.7	30.8	22.0 (10 mths)	28.6	37.4	21.8	24.5	27.0
Meadow Farm ..	23.9	36.1	36.7	34.6	31.2	36.0	24.6	25.6	29.0
South Road ..	—	—	29.4 (10 mths)	24.2	27.6	37.6	24.2	24.9	29.4

<i>Sulphur dioxide</i>				
<i>SO₃ in ngm. per 100 sq. cm. per day</i>				
	1951	1952	1953	
Portishead Dock ..	0.19—1.54	0.19—1.29	0.33—1.65	
Meadow Farm ..	0.08—0.57	0.13—0.87	0.03—1.80	
South Road ..	0.10—1.70	0.08—0.82	0.03—1.20	
Power Station ..	0.05—1.59	0.10—0.77	0.09—1.35	
	Range	Range	Range	
	1954	1955 (average)	1956 (average)	1957 (average)
Portishead Dock ..	0.32—1.72	0.96—3.00 (1.8)	1.07	1.48
Meadow Farm ..	0.04—1.27	0.67—4.28 (1.55)	1.12	0.83
South Road ..	0.04—1.37	0.32—2.20 (1.23)	1.05	0.96
Power Station ..	0.04—1.37	0.90—2.68 (1.56)	0.66	0.85
	Range	Range		

The deposition in the area in tons per square mile indicates a definite improvement over the 1956 figures. This is particularly obvious at the Dock Site where the pollution is practically halved. This site appears to be liable to considerable fluctuation. Whilst generally since 1949 the deposition has been of the order of 500 tons, 1951, 1952 and 1957 have, for reasons unknown, shown quite dramatic improvement which cannot be directly related to rainfall variations.

The sulphur pollution figures would indicate continued improvement at the Meadow and South Road sites with some deterioration at the Dock and Power Station sites as compared with 1956. The overall picture is, nevertheless, a considerable improvement on the conditions prevailing in 1955.

Estimations of silica and phosphorus deposits assessed from that precipitated by rain have continued throughout the year and no significant changes can be reported.

The Dursley Survey

For most of the year the depositions each month at the Street Farm and the Council Offices sites have been remarkably in parallel, and the final total deposits are respectively 59.8 and 59.0 tons per sq. mile, the rainfall in inches being 28.6 and 26.9. Such depositions are much more in line with typical figures for rural depositions and are certainly a marked improvement on the 1956 figures of Upper Cam Vicarage (and later Street Farm) 73.2 tons in eleven months, and Council Offices 94 tons in the year, for strictly comparable rainfall of the order of 25 inches.

The Street Farm sulphur pollution also shows a slight improvement to 0.81 mgms. of SO_2 per 100 sq. cm. per day calculated over the year (against 0.85 in 1956), and at the Council Offices 0.93 (against 1.07 in 1956). All in all the pollution picture for Dursley in 1957 is distinctly better than the previous year when the results were compared with those pertaining to the residential area around the Bristol Zoological Gardens, the data for which is 105 tons deposit and 1.05 average SO_2 for the current year.

Two visits were made to Dursley in May in order to give possible technical help with the problem of a small nuisance alleged to emanate from a large local industrial works. This nuisance was particularly troublesome to staff and students at the Grammar School. Several tests were made at the offending works with the full co-operation of the management, and certainly at the time there was no evidence of significant amounts of sulphur dioxide, sulphuretted hydrogen, or carbon monoxide emanating from the roof vents.

Nevertheless it was agreed to set up in the school grounds a lead peroxide cylinder for a limited period. The seven months' survey produced a total sulphur figure of 0.58 which calculated to a full year would have been 0.97, a figure only slightly more than that at the Council Offices (0.93). This information would tend to suggest that sulphur dioxide was not the cause of the nuisance alleged by occupants of the school.

The Stroud Survey

				<i>Deposit tons/sq. mile</i>	
				<i>1956</i>	<i>1957</i>
Gaumont Cinema	..	..		171.7	115.9
Girls' High School	..	..		82.2	60.5
				<i>Rain (inches)</i>	
				<i>1956</i>	<i>1957</i>
Gaumont Cinema	..	..		24.1	27.9
Girls' High School	..	..		23.0	26.7
				<i>Average SO_3/mgm/100 sq. cm. per day</i>	
				<i>1956</i>	<i>1957</i>
Gaumont Cinema	..	..		0.81	1.41
Girls' High School	..	..		1.28	0.95

The table indicates that there was a marked improvement in the deposit figures for 1957 for both sites although the rainfall figures were a little higher. The sulphur pollution reverses the 1956 position and the present figures are more as one would have expected, that is a higher sulphur pollution at the cinema site.

Two sites remain for brief discussion. At Fullingbridge (Wilts) the pollution is slightly heavy, 61 tons in the year against 48·5 tons for eleven months' survey in 1956. The rainfall figures were 26·5 inches compared with 20·6 inches in eleven months of 1956.

The deposit gauge at the Lannet, Gloucester City, was in operation from 1st August, 1957, and the deposit for five months was 49·5 tons with 11 inches of rainfall. These figures calculated on a twelve-month basis would be 118·8 tons and 26·4 inches, figures which are comparable with conditions around the Zoological Gardens site in Bristol, and on the site at the Gaumont Cinema, Stroud.

Table 23—Summary of Atmospheric Pollution

City				<i>Total Annual Deposit tons per sq. mile</i>	<i>Total Rainfall in inches</i>	<i>Average SO₂ in mgm. per 100 sq. cm. per day</i>
Waterworks	..	..	..	155·88 (10 months)	27·24	2·24
Shaftesbury Crusade	..	..	..	179·99	28·08	2·40
Zoological Gardens	..	..	..	104·92	32·91	1·05
Blaise Castle	..	..	..	93·27	32·56	1·03
St. Annes	..	..	..	156·22 (11 months)	27·63	1·17
Avonmouth						
T.Farm (3 months)	..	..	..	—	—	0·98
Barracks Lane (9 months)	..	..	..	—	—	0·98
Green Splot	..	..	..	—	—	1·82
Avonmouth	..	..	..	—	—	3·13
Portishead, Somerset						
South Road	..	..	..	166·67	29·42	0·96
Meadow Farm	..	..	..	63·38 (11 months)	28·99	0·84
Portishead Dock	..	..	..	285·41 (11 months)	27·0	1·48
Power Station	..	..	..	—	—	0·85
Kingswood	..	..	..	78·28	27·58	1·02
Dursley, Glos.						
Street Farm	..	..	..	59·82	28·57	0·81
Council Offices	..	..	..	59·01	26·87	0·93
Grammar School (7 months)	..	..	..	—	—	0·58
Stroud, Glos.						
Girls' School	..	..	..	60·49	26·67	0·95
Gaumont Cinema	..	..	..	115·58	27·87	1·41
Fullingbridge, Wilts.	..	..	..	61·01	26·55	—
Glos. City						
Lannet	..	..	..	49·47 (5 months)	11·0	—

PART IX. SPECTROSCOPY

This year, for the first time, we have been able to determine the contamination of foodstuffs by toxic metals using fully quantitative methods throughout the whole year. This has led to a reduction in the total number of samples (827) compared with the previous year's total (1,118). Of these samples, 729 were examined for contamination by heavy metals.

Of the non-routine samples, the majority were once again toxicological samples from local hospitals and other medical sources.

Sewage has been examined for metallic contamination, in particular during the controlled discharge of industrial effluent. Several metallic inclusions in foodstuffs were identified during the period; most of these were proved to be tin plate. In addition, three samples of soil from the Netham Site were found not to contain toxic metals.

The scheme for the quantitative determination of tin and lead is now well established, and the lower limit of detection has been extended for such foods as canned fish by the removal of calcium phosphates and brine during the concentration of the sample. It is hoped to extend the scope of spectroscopic analysis to include the quantitative estimation of traces of copper. It is anticipated that this will be facilitated by the use of a purer type of graphite electrode, which has been obtained recently.

It is proposed also to examine certain canned foods, in particular, fish from Far Eastern waters for signs of radioactivity. Preliminary tests in this field have already been carried out.

Our close association with the Geology Department of the University has continued; this year one person has received training in the use of spectrographic apparatus.

PART X. OTHER ACTIVITIES

As in previous years there was again a considerable volume of work not actually of an analytical character.

Lectures of a general character concerning the work of the Department were given to various Townswomen's Guilds and other organisations including the Falfield Prison, the Bristol Club for the Hard of Hearing, Training College Lecturers, and Filton Avenue Boys' School.

Lectures of a more specific and detailed character were given to a Meat Inspectors' Course on preservatives; to a City and Guild's Course and Boiler House Practice Course on Atmospheric Pollution Measurements; to A.R.I.C. Students on spectrographic techniques; to six D.P.H. Students on the Chemistry of Hygiene, and to a class of 25 Veterinary Students.

We were also pleased to welcome to the Department the senior class of Badminton School for Girls, two groups from Colston's School for Girls, boys from Cotham Grammar School and St. George Grammar School, and a group of trainee health visitors, and from overseas two Malayan and six Sudanese officials on study courses. Among individual visitors we were very pleased to see Dr. Cookson and Mr. Williams from Gloucester City; Mr. R. P. Page, formerly Public Analyst for Portsmouth, and my chief when I first started on an analytical career; Mr. Manley, former Public Analyst of Leeds; and Mr. E. Lewis, lately Chief Chemist of Christopher Thomas.

In June I had the privilege of addressing the 58th annual meeting of the Association of Sea and Air Port Health Authorities on the subject of "Some Aspects of the Chemical Examination of Imported Foods"—a paper which was well received and created much interest with Port Medical Officers.

Interest in Civil Defence matters was fully maintained during the year with lectures to trainee Scientific Intelligence Officers, meetings in connection with the Civil Defence exercise "Brace," and late in the year the inauguration of a monthly meeting of trained S.I.O. personnel in order to keep contact and exchange ideas.

Following up the Windscale "incident" in October, Public Health Authorities became increasingly conscious of the implications of fall-out caused by possible failures at atomic power stations and the like. At the request of the Health Committee I visited the Scientific Adviser to the London County Council.

The salient points made in my subsequent report to the Health Committee included the following:

1. In view of the building of atomic power stations at Berkeley and Hinckley Point, it is desirable to have some "datum line" information on conditions before the stations become operative and further that continuous daily measurements should be maintained for the future at one or more locations in the area.
2. As far as can be ascertained the new stations will be less likely to cause dangerous emissions than occurred at Windscale.
3. Nevertheless, control measurements will involve measurement of alpha, beta and gamma emissions and present information indicates that suitable monitoring equipment will cost about £1,000. Such apparatus would also be used for checking food and water supplies.
4. Radio chemistry will play an increasingly important part in all our lives, and the laboratory service must be in a position to meet this new challenge. I foresee that in five to ten years, and possibly earlier, we shall have to consider the appointment of a specialist in this field.
5. The Central Electricity Authority state that the Berkeley Station should be operative in 1960 and Hinckley Point a year later. The C.E.A. have already started monitoring and close liaison with them is most desirable.

Interest in the subject of radioactivity in foods had already been stimulated by a course on the subject in early January and was fully maintained by a further meeting in December—this latter meeting was attended by some eighteen Public Analysts, and gives some idea of the concern caused by the Windscale "incident" and the need for greater public health interest in the subject.

The usual attendances at quarterly meetings of the Weights and Measures Committee, Gloucester County, were made. Two attendances at Court were required, one relating to metal in a cake, and the second to watered milk.

Several visits were made to London to attend meetings of the Association of Public Analysts and two conferences, one in July concerning Additives in Foods, when the American Bar Association held their annual convention; and a second concerning Quality Control. For the latter Symposium, I was privileged to present a paper on "The Public Analyst's Approach to Quality Control." I have continued my work as Secretary of the Standards Committee of the Association of Public Analysts and I wish to express my appreciation and thanks to the Health Committee for permission granted to attend meetings outside Bristol.

Atmospheric pollution matters continue to occupy a significant portion of the Departmental work. The co-ordinating link of these problems is invested in the D.S.I.R. and there were two meetings in May and November, of the Standing Conference on Pollution held at Greenwich and the Institution of Civil Engineers, London, respectively. The Bristol and West Clean Air Committee held their annual meeting in May and there are signs of considerable activity towards the establishment of a smokeless zone in Bristol.

PORT HEALTH SERVICES

Medical Inspection and Sanitary Circumstances

Dr. D. T. Richards

Senior Medical Officer (Port)

SECTION I

General

Throughout 1957 a close and continuous watch was kept on all vessels which arrived at the Port of Bristol. This supervision involved the inspection of all incoming craft by the inspectorate and where necessary, the medical inspection of passengers and members of the crew at the time of arrival. Statistical details are given in the following pages. In many instances this watch upon shipping at the port must be carefully maintained for several days after a ship is given its initial clearance. Bristol is within short reach of ports in West Africa which from time to time become infected with smallpox and the modern cargo vessel is able to reach Avonmouth from one of these ports with six or seven days of the incubation period yet to run. When illness, which may be of an infectious nature, is reported on one of these vessels whilst in port, the matter is at once reported to the port medical officer for immediate investigation. This is an important phase of port health work.

The provisions of the Public Health (Ships) and Public Health (Aircraft) Regulations 1952, have been enforced during the year. No breach of these regulations is to be reported. Medical inspections and detailed medical examinations required by the Aliens Order 1953, have been undertaken at the seaports and at the airport. Special facilities for the treatment of venereal diseases have been supervised at the Avonmouth docks by the port medical officers, as in former years.

Some of the more complex problems which occur during the year in a service of this kind would be resolved less readily but for the kindly co-operation of Officers of H.M. Customs and Excises, H.M. Immigration Officers, officials of the Port Authority and the Shipping Federation's Medical Officers. I am indebted to all of these people for the assistance they have readily given.

This Annual Report is prepared on the lines indicated in Form Port 20, as directed by the Minister of Health in a memorandum to Port Health Authorities. Many of the standing arrangements, fully described in the 1955 Quinquennial Report, have been omitted for the sake of brevity, unless some important change has taken place.

TABLE A

<i>Name of Officer</i>	<i>Nature of appointment</i>	<i>Date of appointment (a) Original</i>	<i>(b) To present post</i>	<i>Qualifications</i>	<i>Any other Appointments held</i>
Wofinden, Dr. R. C.	Port Medical Officer	29.9.47	1.2.56	M.D., B.S., D.P.H., D.P.A.	Medical Officer of Health
Roads, Dr. P. G.	Deputy Port Medical Officer	13.8.56	13.8.56	M.D., D.P.H.	Deputy Medical Officer of Health
Richards, Dr. D. T.	Sen. Asst. Medical Officer (Port)	1.11.38	13.1.47	L.R.C.P. (Lond.) M.R.C.S. (Eng.), D.P.H.	—
Rogan, Dr. E.	Assistant Medical Officer (Port)	1.7.56	1.7.56	L.R.C.P.I., and L.M., L.R.C.S.I. and L.M., D.P.H.	—
Redstone, Mr. F. J.	Chief Port Health Inspector	1.9.40	1.10.43	F.R.S.H., F.A.P.H.I.	Chief Public Health Inspector
Davies, E. I.	Senior Port Health Inspector	13.5.37	1.11.43	Certs. of R.S.I., S.I.E.J.B., R.S.I., Meat and Other Foods Cert. Testamur Welsh School of Medicine in Public Health and Hygiene; Master Mariner (Foreign-going)	—
Blampied, F. C.	District Public Health Inspector (Port)	1.12.48	1.1.57	Certs. of R.S.I., R.S.I. Meat and Other Foods. Smoke Inspector's Certificate R.S.I.	—
Fowler, C. H.	District Public Health Inspector (Port)	1.9.57	1.9.57	Cert. of R.S.I.	—
Lack, W. H. G.	District Public Health Inspector (Port)	1.9.57	1.9.57	Cert. of R.S.I. and R.S.I. Cert. in Tropical Hygiene	—
Bowen, W. T.	Assistant to Port Inspectors	27.1.36	27.1.36	Master Mariner's Cert.	—
Baston, C. W.	Assistant to Port Inspectors	13.2.38	13.2.38	—	—
Clevely, R. E.	Senior Group Clerk	20.3.44	11.6.56	L.G.E.B. (Clerical) Examination	—

IN ADDITION:— The following Assistant M.O.'s undertake relief Port duties as required: Dr. A. M. Fraser and Dr. J. E. Kaye.

SECTION II

Amount of Shipping Entering the District During the Year

Foreign-going arrivals were 121 more than in the preceding year. This was due to greater activity in the trade with near Continental ports, vessels of smaller tonnage being employed. The total shipping tonnage, however, was 163,000 tons less than the total for 1956.

Comparative figures for "foreign" and "coastwise" arrivals, and tonnages of imports and exports during the last four years are shown in the following table:—

<i>Year</i>	<i>Vessels normally trading</i>		<i>Tonnage of foreign</i>	
	<i>Foreign</i>	<i>Coastwise</i>	<i>Imports and Exports</i>	
1957 ..	1,563	4,334	3,421,199	94,856
1956 ..	1,442	4,855	3,607,490	126,577
1955 ..	1,678	5,028	3,769,641	93,043
1954 ..	1,441	4,925	3,041,146	72,728

SECTION III

Character of Shipping and Trade During the Year

The trade returns for the port during 1957 showed a downward trend and this became more noticeable as the year came to its close, when, as in most other ports of the country, the effect of recent economic and financial measures was reflected in the reduction of foreign imports. These decreased by 186,000 tons and exports were reduced by 31,000 tons.

Tables (B) and (C) which follow, deal adequately with the character of shipping and trade which remains constant at the port from year to year.

TABLE B

Amount of Shipping entering the District during the year

<i>Ships from</i>	<i>Number*</i>	<i>Tonnage*</i>	<i>Number inspected</i>		<i>No. of ships reported as having or having had during the voyage infectious disease on board†</i>
			<i>by the Medical Officer of Health</i>	<i>by the Public Health Inspector</i>	
Foreign ports	1,563	3,726,814	708	1,591	29
Coastwise ..	4,334	1,228,534	—	689	—
Total ..	5,897	4,955,348	708	2,280	29

* Figures supplied by courtesy of the Port of Bristol Authority. (Discrepancy between number of vessels shown as arriving and number inspected in foreign section arises from differing classification of "Foreign" and "Coastwise" vessels as applied by the Port of Bristol Authority and the Bristol Port Health Authority).

† Excluding vessels having venereal disease on board.

TABLE C (a)
Passenger Traffic

		<i>Seaport</i>	<i>Airport</i>
Inwards	British	1,231	980
	Alien	248	584
Outwards	British	507	954
	Alien	124	548

TABLE C (b)
Cargo Traffic

PRINCIPAL IMPORTS						
<i>Commodities</i>						<i>Tons</i>
Cocoa	..	..	..	..	..	22,202
Feeding stuffs for livestock	..	..	..	..	..	348,044
Fertilisers	..	..	..	..	..	234,474
Flour and other cereal products	..	..	..	..	..	14,798
Fruit: Bananas	..	..	..	..	..	35,305
Citrus	..	..	..	..	..	10,633
Dried	..	..	..	..	..	6,829
Other kinds	..	..	..	..	..	14,995
Grain: Barley	..	..	..	..	..	241,200
Maize	..	..	..	..	..	177,335
Wheat	..	..	..	..	..	470,172
Other kinds	..	..	..	..	..	13,884
Metals: Aluminium	..	..	..	..	..	55,349
Copper	..	..	..	..	..	11,626
Iron and steel	..	..	..	..	..	57,021
Other kinds	..	..	..	..	..	27,977
Molasses	..	..	..	..	..	72,578
Oilseeds and oilnuts	..	..	..	..	..	71,365
Ores	..	..	..	..	..	151,089
Paper	..	..	..	..	..	36,805
Petroleum: Spirit	..	..	..	..	..	282,347
Other kinds	..	..	..	..	..	608,777
Provisions: Butter	..	..	..	..	..	18,279
Cheese	..	..	..	..	..	8,742
Lard	..	..	..	..	..	4,469
Meat: Bacon and ham	..	..	..	..	..	2,591
Canned	..	..	..	..	..	8,354
Frozen	..	..	..	..	..	18,805
Other kinds	..	..	..	..	..	190
Sugar	..	..	..	..	..	5,307
Tea	..	..	..	..	..	9,482
Timber	..	..	..	..	..	122,330
Tobacco	..	..	..	..	..	31,433
Wines and spirits	..	..	..	..	..	12,191
Woodpulp	..	..	..	..	..	131,489
Other goods	..	..	..	..	..	82,723
Total foreign imports						3,421,199

PRINCIPAL EXPORTS						
Buildings, prefabricated	..	..	..	..	..	38
Carbon, black	..	..	..	..	..	1,408
Chemicals	..	..	..	..	..	3,845
Clay	..	..	..	..	..	13,385
Cocoa and cocoa waste	..	..	..	..	..	2,295
Coke	..	..	..	..	..	10,694
Government stores	..	..	..	..	..	9,409
Iron and steel	..	..	..	..	..	8,516
Motor vehicles and parts	..	..	..	..	..	12,887
Ores	..	..	..	..	..	1,319
Painters' colours	..	..	..	..	..	510
Paper	..	..	..	..	..	284
Petroleum	..	..	..	..	..	147
Strontia	..	..	..	..	..	3,348
Other goods	..	..	..	..	..	26,771
Total foreign exports						94,856

Note:—Figures supplied by courtesy of Port of Bristol Authority.

TABLE C (c)
Principal Ports from which Ships arrive

<i>Country</i>	<i>Ports</i>
Algeria	Algiers, Oran, Philippville.
Argentina	Buenos Aires, Bahia Blanca, Patagonia, Rosario, San Lorenzo.
Australia	Adelaide, Albany, Banbury, Brisbane, Cairns, Freemantle, Geelong, Geraldton, Melbourne, Port Pirie, Sydney, Townsville.
Belgium	Antwerp, Bruges, Ghent.
Brazil	Port Alegre, Santos.
British West Indies ..	Antigua, Barbados, Bowden, Dominica, Kingstown, Montego Bay, Oracabessa, Port Antonio, St. Kitts, Trinidad.
Burma	Rangoon.
Canada	Botwood, Halifax, Kittimat, Montreal, New Westminster, Port Alfred, Port Alberni, Port Churchill, Prince Rupert, Quebec, St. John, Sorel, Three Rivers, Vancouver.
Canary Islands	Las Palmas.
Ceylon	Colombo.
Cyprus	Famagusta, Limassol.
Cyrenaica	Tripoli.
China	Shanghai.
Denmark	Copenhagen, Esberg, Frederikssund.
Dominica Republic ..	San Pedro de Macoris.
Egypt	Alexandria, Port Said.
Finland	Ham na, Hango, Haukipudas, Helsingfors, Kotka.
France	Abbeville, Bayonne, Bordeaux, Boulogne, Deauville, Dieppe, Duclair, Dunkirk, Le Havre, La Rochelle, Libourne, L'Orient, Marseilles, Nantes, Nemours, Quimper, Rouen, Tonny-Charente, Treport, St. Malo, St. Valery, Vannes.
French Cameroons ..	Tiko Is.
French Equatorial Africa	Dakar, Port Gentil.
Gambia	Bathurst.
Germany	Bremen, Bremerhaven, Emden, Friedrichshaven, Hamburg, Harborg, Stettin, Wismar.
Ghana	Accra, Takoradi.
Greece	Katakolon, Patras, Piraeus, Zante.
India	Bombay, Calcutta, Chalna, Cochin, Mangalore, Vizagapatam.
Indonesia	Sourabaya, Tegal.
Iran	Basra, Bahrein.
Israel	Jaffa.
Italy	Bari, Genoa, Livorno, Naples, Palermo, Salerno, Venice.
Japan	Kobe, Yokohama.
Jugoslavia	Rijeka, Split.
Kenya	Mombasa
Kuwait	Mena al Ahmadi.
Libya	Benghazi.
Malay States	Penang Is., Port Swetenham, Singapore.
Mexico	Tampico.
Morocco	Ceuta, Casablanca, Saffi, Sousse.
Mozambique	Beira, Mozambique.
Netherlands	Amsterdam, Delfzyl, Dordrecht, Rotterdam, Spisk, Terneuzen.
Netherlands West Indies	Aruba, Curacao.
Nauru Island	
New Zealand	Auckland, Bluff, Port Chalmers, Lyttleton, New Plymouth, Otaru, Napier, Timaru, Wellington.
Nigeria	Lagos, Port Harcourt, Sapele, Warri.
Norway	Aalesund, Bergen, Floro, Kristiansund, Oslo, Risor, Skein, Havanger, Stavanger, Tredestrand, Trondheim.

TABLE C (c) contd.

<i>Country</i>	<i>Ports</i>
Pakistan	Chittagong, Karachi.
Persian Gulf	Bahrein Is., Ras Tanura.
Portugal	Lisbon, Oporto, Leixors.
Puerto Rico	San Juan.
Rumania	Constanza.
Sierra Leone	Freetown.
South West Africa	Walvis Bay
Spain	Almeria, Barcelona, Bilbao, Burriana, Cartagena, Huelva, La Vera, Tarragona, Seville, Valencia.
Spanish West Africa	Fernanpo.
Sudan	Port Sudan.
Sweden	Gelfe, Gothenburg, Iggesund, Kramfors, Malmo, Nyhammar, Stockholm, Sundsvall.
Tanganyika	Dar-es-Salaam, Zanzibar.
Tunisia	Sfax, Tunis.
Turkey	Iskanderun, Istanbul.
Uruguay	Puerto la Cruz, Montevideo.
Union of South Africa	Cape Town, Durban, East London, Port Elizabeth.
Union of Soviet Socialist Republics	Leningrad, Novorossisk.
United States of America	Baltimore, Baton Rouge, Baytown, Beaumont, Boston, Corpus Christi, Freeport, Galveston, Houston, Los Angeles, Mobile, New Orleans, Newport Mews, New York, Norfolk, Philadelphia, Port Arthur, Port Sulphur, Port Jacksonville, San Francisco, Tacoma, Tampa, Texas City, Wilmington.
Venezuela	Punta Cardon, Caracus.
Yugoslavia	Sibenik.

SECTION IV**Inland Barge Traffic**

Number of craft entering during the year: 2,965

Tonnage of craft entering during the year: 236,442

Places served by the traffic:

Banbury	Frampton	Sharpness	
Barry	Gloucester	Stourport	Worcester
Bridgwater	Lydney	Swansea	
Cardiff	Newport	Upton	

SECTION V**Water Supply**

(1) *Source of Supply for:—*

(a) The District.

(b) Shipping.

These were described in my report for 1955 and are unchanged.

(2) *Reports of Tests for Contamination*

Routine samples were taken from several points on the water company's supply mains during 1957. They were all found to be satisfactory.

(3) *Precautions taken against Contamination of Hydrants and Hosepipes*

Standpipes and hoses, used to convey water from the quayside mains to ships, are regularly flushed out and cleansed. Water is allowed to run for a few minutes before being delivered to the ships' tanks.

(4) *Number and Sanitary Conditions of Water Boats*

One water boat is available in the Bristol City Docks. It was brought into operation, replacing the old water boat at these docks, in July 1955, and contains two water tanks each of 1,300 gallons capacity.

Details concerning samples of water taken from this craft and other vessels are contained in a special report dealing with this work in the text which follows.

SECTION VI

Public Health (Ships) Regulations, 1952

(1) *List of Infected Areas (Regulation 6)*

This list is prepared and brought up to date monthly. It summarises the information contained in the World Health Organisation's Weekly Epidemiological Record of Quarantinable Diseases prepared for the guidance of port health authorities, and is regularly circulated as follows, any important addition or amendment being subsequently forwarded during the month as a separate memorandum—

H.M. Customs and Excise (Seaport and Airport)
H.M. Immigration Officer (Seaport and Airport)
The Docks Superintendent
The Haven Master (for distribution to pilots)
The Manager, Lulsgate (Bristol) Airport
Medical Officers, Shipping Federation
Medical Officers, Special Treatment Centres
Waterguard Superintendent
Pilotage Collector, Pill

(2) *Radio Messages*

(a) Arrangements for sending permission by radio for ships to enter the district (Regulation 13).

(b) Arrangements for receiving messages by radio from ships and for acting thereon (Regulation 14 (1) (a) and (2)).

These were described in the 1955 Annual Report and are unchanged.

(3) *Notifications otherwise than by Radio (Regulation 14 (1) (b))*

Arrangements for receiving notifications otherwise than by radio and for acting thereon.

These are unchanged.

(4) *Mooring Stations (Regulations 22 to 30)*

Situation of stations, and any standing directions issued under these Regulations.

The details given in the quinquennial report are unchanged.

(5) *Arrangements for:—*

(a) Hospital accommodation for infectious diseases (other than smallpox).

(b) Surveillance and follow-up of contacts.

(c) Cleansing and disinfection of ships, persons, clothing and other articles.

Unchanged.

SECTION VII

Smallpox

1. Cases and suspected cases of smallpox occurring within the district are sent to the smallpox wing of the Ham Green Infectious Diseases Hospital, Pill, near Bristol.

2. Ambulance facilities are provided by the ambulance service of the Bristol Corporation, which is administered by the Medical Officer of Health.

The vaccinal state of the ambulance crews is satisfactory and subject to continuous review.

3. One consultant is available in the event of smallpox; he is Dr. J. Macrae, Medical Superintendent, Ham Green Hospital, Pill, near Bristol.

4. Facilities for the laboratory diagnosis of smallpox are available through the Public Health Laboratory Service at Canynge Hall.

SECTION VIII

Venereal Disease

Full information concerning the situation, and giving the hours during which the Medical Officer is in attendance at the venereal disease centres at Avonmouth and Bristol Docks, is given to the crew of every vessel entering the port. This information is contained in handbills (including a sketch map) which are freely distributed to each ship. When indicated, in-patient treatment under the direction of the venereal diseases consultant is available at the Ham Green Infectious Diseases Hospital.

The arrangement whereby the Port Medical Officers who are usually the first to ascertain venereal conditions, act in an additional capacity as medical officers to the venereal disease centre, has continued. It has worked satisfactorily.

The following table relates to seamen treated at the Avonmouth Centre during the past five years:

Year		<i>Syphilis</i>	<i>Chancroid</i>	<i>Lympho- gramuloma</i>	<i>Gonorrhoea</i>	<i>Non V.D.</i>	<i>Total</i>
1953	..	26	6	6	142	277	457
1954	..	30	20	3	112	277	442
1955	..	39	13	3	135	278	468
1956	..	27	16	2	116	252	413
1957	..	20	13	5	123	254	415

SECTION IX

Cases of Notifiable and other Infectious Diseases on Ships

Table "D" is self-explanatory, no other incidents of outstanding interest having occurred during the year.

TABLE D

Disease	Category and number of cases during the year							Number of ships con- cerned
	Cases landed from ships from foreign ports		Cases which have occurred on ships from foreign ports but have been disposed of before arrival		Cases landed from other ships		Total	
	Pass.	Crew	Pass.	Crew	Pass.	Crew		
Chicken Pox	—	1	—	—	—	—	1	1
Influenza	—	35	—	43	—	—	78	18
Influenzal pneumonia	—	3	—	—	—	—	3	3
Malaria	—	1	—	—	—	—	1	1
Measles	2	1	—	—	—	—	3	2
Pulmonary T.B. ..	—	3	—	—	—	—	3	3
Whooping Cough	1	—	—	—	—	—	1	1
Totals ..	3	44	—	43	—	—	90	29

Influenza, Asian Type

The m.v. *Clan Chattan* arrived at Avonmouth on 23rd June, 1957, from Tilbury via Rotterdam. Previously she had sailed from Calcutta on the 11th May, 1957, and came to Tilbury on the 14th via Colombo on 19th May, 1957, and Port Said on 3rd June, 1957.

Whilst at Tilbury on 17th June, 1957, three members of the native crew sickened with symptoms of influenza—headache, sore throat, joint pains, painful cough, etc. The illness was of two to three days duration, and quickly spread to other members of the crew in the native quarters. When the vessel was boarded, twenty-five men had developed the illness in groups of three or four during the week, from a total of thirty-seven.

A full examination was carried out. Five seamen were found to have temperatures ranging from 100° F. to 101° F. and were sent to the isolation hospital chiefly for the purpose of virus identification.

Serological tests later in the case of four men sent to hospital gave evidence of recent infection with Influenza A. virus.

It is believed that this was the first recorded incidence of ship-borne Asian influenza during the 1957 epidemic, and it is also of interest to record that the patients concerned mixed freely whilst in the Port of London with a group of Pakistanis who had recently arrived by air from Pakistan to join an outgoing ship. Cases of Asian influenza are understood to have been present in the latter group of seamen.

SECTION X

Observations on the occurrence of Malaria on Ships

During the last few years there has been a striking reduction in the number of cases of malaria ascertained in vessels coming from African ports. Only one case was reported in 1957:

m.v. "*Jessie Stove*" (*Norwegian*). This vessel arrived at Avonmouth on May 11th, 1957, after a three weeks' voyage from Tiko, West Africa. Two days after arrival, a seaman sickened with malaise, a high temperature and rigors. He was transferred to the Infectious Diseases Hospital where a diagnosis of malaria was made.

SECTION XI

Measures taken against Ships Infected with or Suspected for Plague

1. All vessels from infected or suspected ports are required to attach efficient rat guards to the mooring ropes.
2. Suitable lengths of tarred hessian are wrapped around moorings outside the leads, when the standard types of rat guards are not available.
3. Arrangements are made to fumigate the vessel with hydrogen cyanide gas when this is desirable.

SECTION XII

Measures against Rodents in Ships from Foreign Ports

1. Routine measures of inspection and rodent control in ships, described in detail in the Annual Report for 1955, were maintained throughout the year.

(a) Foreign-going ships

Only 74 (5 per cent.) of the 1,591 foreign-going arrivals inspected during the year were found to have evidence of rats on board. Of this total, 61 showed

very slight traces of activity and 13 vessels showed slight to pronounced evidence of infestation. These figures are examined further in the accompanying table.

Forward notices were sent to terminal ports in respect of 11 ships which required further measures of rat repression. Replies were received from one port only and these indicated that in 3 ships an additional 38 rats (17, 14 and 7 respectively) had been destroyed.

<i>No. of rats per Ship</i>	<i>1957 No. of Ships</i>	<i>Total rats recovered</i>	<i>1956 No. of Ships</i>	<i>Total rats recovered</i>	<i>1955 No. of Ships</i>	<i>Total rats recovered</i>
1- 5	4	13	12	39	15	38
6-10	3	23	4	38	7	58
11-15	2	23	2	23	5	69
16-20	1	18	1	19	3	52
21-25	—	—	—	—	—	—
26-30	1	29	—	—	—	—
31-35	1	34	1	33	2	70
65-70	1	69	1	61	1	64
Over 70	—	—	—	—	1	77
Totals	13	209	23	260	36	472

The total of 209 black rats recovered from ships in 1957 by trapping or other measures represents (with the exception of the total for 1953) the lowest number destroyed in any year since records have been kept. This is a very satisfactory figure. It indicates that more efficient methods are being used, and that closer attention is now being given to measures for the control of infestations and harbourages in British and foreign sea-ports and in ships.

Careful searching, trapping and, when necessary, fumigation of ships must nevertheless continue, as the occasional instance of a moderately to heavily infested ship is still to be found. The above table illustrates this point. In 6 ships, 11 rats or more (with a maximum of 69 in one ship) were destroyed. It is of interest to note that the vessel from which 69 rats were recovered was in possession of a Deratting Exemption Certificate issued in a United States' port two months previously. Careful examination of rat runs and smears showed that the infestation *was not of recent origin* and very little imagination is needed to visualise conditions on board if repressive measures had been delayed until the certificate became invalid four months later. In this instance, the owners consented to have the ship fumigated and an increased concentration of hydrogen cyanide gas was applied to the holds after discharge of the cargo.

As shown in Table F, 158 deratting exemption certificates were granted to ships during the year. The number of vessels given deratting certificates after appropriate treatment totalled six. Hydrogen cyanide gas was used to fumigate four of these, from which a collective total of 95 rats were recovered. The remaining two ships were treated with sodium fluoroacetate poison bait, 61 rats being recovered; 27 from one vessel and 34 from the other.

TABLE E
Rodents Destroyed during the year in Ships from Foreign Ports

<i>Category</i>	<i>Number</i>
Black rats	209
Brown rats	—
Species not known	—
Sent for examination	134
Infected with plague	—
Mice	22

TABLE F

Deratting Certificates and Deratting Exemption Certificates issued during the year for Ships from Foreign Parts

<i>No. of Deratting Certificates issued</i>					<i>Number of De-ratting Exemption Certificates issued</i>	<i>Total Certificates issued</i>
<i>After fumigation with H.C.N.</i>	<i>Other fumigant</i>	<i>After trapping</i>	<i>After poisoning</i>	<i>Total</i>		
4	—	—	2	6	158	164

(b) Coastwise vessels

Apart from very slight traces of rats and mice discovered in three ships during routine inspections, coastwise traders have continued to be maintained in a rat-free condition.

On application by the owners, five rodent control certificates were issued during the year.

(c) Inland Water and Dock Craft

There has been a considerable reduction in the number of barges used for animal food storage. When they have been employed for this purpose the storage period has been of short duration, and consequently there has been no build-up of infestations. Prompt repairs to damaged wooden ceilings and sheathings have also helped to prevent rats gaining access to ideal harbourages. Periodical inspections show that these craft are comparatively free of rats.

Floating grain elevators, which are moored alongside ships for the discharge of bulk grain cargoes, are always likely to pick up rats. Periodic trapping and baiting has therefore been necessary in craft of this kind. This treatment, together with the elimination of wood sheathings and the removal of accumulations of disused material has successfully reduced the number of rats to a minimum.

2. *Arrangements for the Bacteriological or Pathological Examination of Rodents with Special Reference to Rodent Plague, including the number of Rodents sent for Examination during the Year*

A routine proportion of all rats recovered is sent for examination for evidence of *B. pestis* to the University of Bristol Laboratories, Canynge Hall, Clifton. Of the 209 black rats obtained from ships and inland water craft, 134 (64 per cent.) were sent to the laboratory for examination. All were reported to be free from infection with plague.

3. *Arrangements in the District for Deratting Ships, the Methods used, and, if done by a Commercial Contractor, the Name of the Contractor*

The deratting of ships is done by commercial contractors who normally use hydrogen cyanide gas for the purpose. The undermentioned firms carried out this work at the port during 1957:

London Fumigation Co. Ltd., London
Fumigation Services Ltd., London
Associated Fumigators Ltd., London

SECTION XIII**Inspection of Ships for Nuisances**

Visits and re-visits totalling 2,964 were made to foreign-going and coastwise vessels during the year.

The number of defects dealt with amounted to 490, and 331 of these were remedied at this port. The remainder were referred to the Ministry of Transport Surveyor, or to the Health Authorities at other ports where voyage repairs were

due to be carried out. The improved standards of hygiene noticeable during the last few years have been maintained. Greater attention is being given to insect control in all classes of ships and the use of insecticidal lacquers has become more general. Very few heavy infestations of cockroaches, and only two slight instances of bed-bug infestation were found during 1957.

TABLE G
Inspection of Ships for Nuisances

Nature of defects and inspections	No. of inspections carried out	Notices served			No. of defects found	Result of serving notices	
		Statutory	In-formal	Forward (PHAs/ M.O.T.)		No. of defects	
						Remedied	Not remedied
Original construction					16	5	11
Structural wear and tear	2,964	—	65	35	196	110	86
Dirt, vermin, etc.					278	216	62
Totals	2,964	—	65	35	490	331	159

Most of the ships which were in commission four years ago, when the Merchant Shipping (Crew Accommodation) Regulations, 1953, came into force, have had a general survey since then. Inspection of the older type of vessel has shown that advantage has been taken during survey periods to carry out certain necessary alterations or provide additional facilities and fittings required by these Regulations. There are noticeable improvements in artificial lighting and in ventilation, in messroom, washing and sanitary fittings, and in the supply of cold drinking and washing water from gravitational storage tanks. It has also been noticed that the internal bulkheads erected as a consequence of structural alterations in accommodation, have been of insect vermin-proof material.

Some of the "coastwise" traders built twenty or more years ago have presented the Surveyors with rather difficult structural problems in their efforts to bring the accommodation up to Regulation standards.

Hygiene of Crews' Spaces
Vessels trading Coastwise and Foreign

		<i>British</i>		<i>Foreign</i>		<i>Totals</i>	
		<i>s.s.</i>	<i>m.v.</i>	<i>s.s.</i>	<i>m.v.</i>		
No. of revisits to vessels in dock by							
Inspectors		704	945	348	967	2,964	
No. of vessels reported defective ..		102	73	25	40	240	
No. of vessels—defects remedied ..		74	51	18	25	168	
		<i>Original Construction</i>		<i>Wear and Tear</i>		<i>Dirt and vermin</i>	
<i>Defects</i>	<i>No. of</i>	<i>No. of</i>	<i>No. of</i>	<i>No. of</i>	<i>No. of</i>	<i>No. of</i>	<i>No. of</i>
<i>Nationality</i>	<i>Ships Inspected</i>	<i>Ships</i>	<i>defects</i>	<i>Ships</i>	<i>defects</i>	<i>Ships</i>	<i>defects</i>
British	s.s.	394	5	8	35	119	77
	m.v.	825	5	7	27	51	51
Foreign	s.s.	231	—	—	5	9	22
	m.v.	830	1	1	10	17	30
Totals		2,280	11	16	77	196	180

Defects	No. of Defects			No. of Defects reported by Forward Notices, etc., to:—			No. of Ships	
	Nature	Found	Rem'd	Not rem'd	Other PHAs.	M.O.T. Surv'r	Owner Master	British Foreign
Original construction		16	5	11	—	12	8	10 1
Wear and Tear ..		196	110	86	14	—	116	62 15
Dirt, vermin and other causes		278	216	62	24	—	74	128 52
Totals ..		490	331	159	38	12	198	200 68

Many of these old coasters are so constructed that there is insufficient space to extend the quarters, or carry out extensive alterations. The best that could usually be done in the circumstances was to make some minor re-arrangement of the existing space in order to provide a small messroom separate from the sleeping quarters.

Furthermore, in some of these old vessels food storage is unsatisfactory. A small wooden meat-safe secured on the boat deck is often the only means of storing such perishables as meat and fish. The vessels are frequently on passages of two to five days' duration. There is, therefore, especially during the summer months, a definite need for a small refrigerator unit to store food of this nature. The owners have been advised, and the Ministry of Transport Surveyor notified when ships have been found without such facilities.

Smoke Nuisances

A system of recording emissions from regular traders and harbour vessels has been instituted at the City Docks.

Warnings were given for excessive smoke emission on a number of occasions but generally, as at Avonmouth Docks (where 25 visits were made to ships for this purpose) the nuisances were abated forthwith.

Among the worst offenders were some of the harbour vessels. The owners concerned have been approached and have promised their full co-operation. Observations will continue.

SECTION XIV

Public Health (Shell Fish) Regulations 1934 and 1948

No changes have occurred during 1957.

SECTION XV

Medical Inspection of Aliens

The organisation of this work is unchanged.

The provisions of the *Aliens Order, 1953*, are in full operation at the sea-ports and at the Lulsgate (Bristol) Airport. The following medical officers hold warrants of appointment as Medical Inspectors of Aliens:

- Dr. R. C. Wofinden, Medical Officer of Health
- Dr. P. G. Roads, Deputy Medical Officer of Health
- Dr. D. T. Richards, Senior Assistant Medical Officer (Port)
- Dr. E. Rogan, Assistant Medical Officer of Health (Port)
- Dr. A. Fraser, Assistant Medical Officer of Health
- Dr. J. E. Kaye, Assistant Medical Officer of Health

Medical Inspection of Aliens, Annual Return for 1957

	SEAPORT				AIRPORT			
	Total	No. inspected by Medical Inspector	No. subjected to detailed examination by the Medical Inspector	No. of Certificates issued	Total	No. inspected by Medical Inspector	No. subjected to detailed examination by the Medical Inspector	No. of Certificates issued
(a) Total number of aliens landing at the Port	248	216	32	—	584	581	3	1
(b) Aliens refused permission to land by Immigration Officer	5	—	1	1	1	—	—	—
(c) Total aliens arriving at the Port	253	216	33	1	585	581	3	1
Total number of vessels/aircraft carrying alien passengers ..				Seaport 270	Airport 258	OUTWARDS		
Number of vessels/aircraft dealt with by the Medical Inspector				270	258	Seaport 119	Airport 285	—

SECTION XVI

Arrangements for the Burial on Shore of persons who have died on board Ship from Infectious Disease

No changes have occurred during 1957.

SECTION XVII

Other Matters

Water Sampling

A total of 13 water samples was taken for bacteriological and chemical analysis during 1957. Of this number 7 were obtained from water tanks in ships, 3 from the supply tanks of the fresh-water boat at the City Docks and 3 from shore hydrants.

The first two samples taken from the water boat, although not adversely reported upon, indicated some variation in the quality of the water. Measures taken to try and account for this included checking for leaks and the cleansing of storage tanks and connecting pipes. A sample taken after this was done gave a good result. Water was also sampled from the quayside hydrant outlet situated at the termination of a considerable length of main, infrequently used, from which the water-boat usually replenished supplies. This confirmed earlier suspicions that the water tended to be stagnant at this point. The supply from a nearby hydrant was then tested and found to be quite suitable. It has been requested, therefore, that supplies for the water-boat are obtained from this latter source in future.

It is again appropriate to refer to the confusion that arises in ships which carry two fresh water supplies, i.e., one for drinking and the other for washing purposes. Complaints arising from such confusion were dealt with in two ships during the year. In each case, samples of the drinking water were found to be satisfactory, but the fresh water originally intended only for washing purposes, and which the men had used for drinking, was found to be unsuitable.

The instances mentioned here were referred to the owners, who arranged for the tanks to be cleansed. The Ministry of Transport's Ships Provisions' Officers, who are directly concerned with water supplies in ships, were also informed. These officers were able to advise that the Ministry of Transport propose an amendment of the Regulations whereby all fresh water supplies in ships, whether for drinking or washing purposes, shall conform to minimum standards of purity and palatability required in water used for drinking purposes. When these provisions are brought into operation, much will have been done to eliminate some of these complaints and possibly reduce intermittent outbreaks of intestinal disorders which may often arise as a result of drinking the wrong water supply on board ship.

Measures against Rodents on Docks, Quays, etc.

Treatment of buildings and waste ground by periods of trapping alternating with the laying of poison baits such as zinc phosphide, or one of the anti-coagulants, has been in progress continuously throughout the year. The majority of privately owned mills and factories, as well as Port Authority land and premises, are now treated under the direction of the Rat (Repression) Officer. This arrangement is a more satisfactory one, for block treatment of adjacent premises and adjoining land can be carried out simultaneously.

An important part of the work of rodent repression in the Avonmouth Dock area during the last few years has been directed towards ridding the provender mills and warehouses of black rats. This presents a difficult problem because once this species is well established, it harbours and thrives in the most

inaccessible parts of large buildings of this kind. These efforts have been worth while and there is some encouragement in the fact that the total of 234 black rats caught in dock premises is 112 less than the total for the preceding year.

The following table gives comparative figures for rodents of different species, destroyed during 1957 and the two previous years.

Category	1957	1956	1955
Black rats	234	346	426
Brown rats	112	203	127
Total	346	549	553
Sent for examination	141	95	120
Infected with plague	—	—	—
Mice	11	15	33

Of the 346 rats recovered in the dock area during 1957, 141 (103 black and 38 brown) were sent to the laboratory for examination. All were found to be free from plague-infecting organisms.

Food Inspection

Approximately 651,000 tons of imported food cargoes, representing a wide range of commodities and originating from more than 30 different countries, were discharged at this port during 1957. This quantity is 40,000 tons less than the amount for the previous year. The decrease has been due mainly to a reduction in the importation of wheat, flour and other cereals.

The inspection and sampling of cargoes has been an important feature of port health duties and, as in the course of this work, 495 samples of 60 different varieties of foods and a further 789 samples of frozen whole eggs were taken during the period.

Meats (Condemned)

Description	Decomposition and Mould			Brine Stain			Contamination and Taint			Total		
	T.	C.	Q. lb.	T.	C.	Q. lb.	T.	C.	Q. lb.	T.	C.	Q. lb.
Beef	13	1	22	—	—	—	—	—	—	13	1	22
Lamb	9	3	13	7	3	23	—	1	25	18	1	5
Mutton	—	—	—	4	1	19	—	—	—	4	1	19
Pork	2	1	27	—	—	—	2	—	12	4	2	11
Offal (Beef) ..	—	—	—	—	—	—	—	—	—	1	—	—
Total	1	6	— 23	12	1	14	2	2	9	2	1	— 18

Canned Goods (Condemned)

Description	Reason for condemnation	Quantity (tins)	Total		
			T.	C.	Q. lb.
Canned fruit and fruit pulp	Blown, crushed, burst and rust holed tins	4,791	6	8	1 —
Canned fruit juice ..	Blown, pierced, burst, crushed and rust holed tins	185	—	3	3 13
Canned meats ..	Blown, pierced and rust holed tins	1,176	18	2	3
Canned fish ..	Crushed and burst tins	253	—	1	2 6
Canned tomatoes ..	Blown, burst "springer" pierced and leaking tins	4,918	1	7	2 21
Canned tomato juice	Blown and burst tins	58	2	2	18
Canned tomato purée	Pierced tins	4	—	—	17
Canned jams ..	Crushed and burst tins	27	—	2	7
Canned vegetables ..	Crushed and blown tins	29	—	1	—
Condiments (chutney)	Crushed and broken bottles ..	1,203	7	3	20
Totals .. ..	.. ..	12,644	9	11	1 21

Miscellaneous Foods (Condemned)

<i>Description</i>	<i>Reason for condemnation</i>	<i>T.</i>	<i>C.</i>	<i>Q.</i>	<i>lb.</i>
Barley	Water and oil contaminated, mouldy and decomposed	12	10	—	—
Cereals	Insect infested		7	3	5
Cheese	Vermin contaminated		1	1	8
Chocolate couverture ..	Rodent damaged and contaminated ..				7
Coconuts (whole) ..	Decomposed			3	12
Coconuts (dessicated)	Mouldy				24
Cotton seed	Decomposed	6	10	1	4
Currants	Damp and mouldy		1	2	23
Dried fruit	Insect infested, perished and mouldy ..	3	3	3	27
Dried vegetables ..	Insect infested		3	3	7
Eggs (whole frozen) ..	Bacterial contaminated		4	3	—
Flour	Insect infested and perished	2	8	2	18
Lard	Oil and dirt contaminated	2	1	3	21
Margarine	Foul-water contaminated			1	20
Melons	Oil saturated		2	—	19
Milk Powder	Mouldy and tainted	9	9	—	2
Potatoes	Decomposed	3	17	2	21
Prunes	Mouldy		1	2	12
Raisins	Mouldy				13
Rice	Phenol contaminated, mouldy and insect infested	6	18	1	4
Sago	Mouldy				10
Strawberry Pulp ..	Damaged cask			3	9
Tapioca	Mouldy				17
Tea	Mouldy and water damaged		17	2	8
Wheat	Decomposed, water and oil damaged ..	37	9	3	24
Total weight		86	13	1	7

Particulars of Foods detained for Re-exportation or Reconditioning at Local or other Food Depots

<i>Description of food</i>	<i>Reason for detention</i>	<i>Tons (approx.)</i>
Butter	Taint and dirty containers	15
Canned fruit	Rusty, holed and blown tins	59
Canned vegetables ..	High percentage of blown tins	12
Canned tomatoes ..	High percentage of blown tins	19
Canned tomato juice	High percentage rusty tins	3
Dried fruit	Wet damage, mouldy and fermenting ..	46
Flour	Wet damage and mouldy	45
Lambs	Brine stain and dirty cloths	42
Lamb offal	Dirty condition	4
Lard	Contaminated	20
Milk powder	Mould taint	20
Mutton	Brine stain and dirty cloths	2
Tea	Wet damage and mouldy	45
Total weight		332

Samples of Imported Foodstuffs taken during 1957, and Sent to the Analyst or Bacteriologist for Examination

<i>No. of Samples</i>	<i>Description of commodity</i>	<i>Country of origin</i>	<i>Exam. for*</i>	<i>Result</i>
3	Apricots .. (canned)	South Africa	M	Satisfactory
1	" .. "	Australia	M	"
5	" pulp .. "	Spain	M	"
1	Asparagus .. "	Australia	S	"
8	Beans .. "	South Africa	BM	"
2	Beef steak .. "	Australia	B	"
6	" .. "	Ireland	B	"
6	Butter .. (fresh)	New Zealand	Comp.	"
1	Butter milk powder	New Zealand	S	"
9	Cherries .. (canned)	Italy	BM	"
6	Corned beef .. "	Argentina	BM	"
2	" .. "	France	BM	"
1	Corn cobs .. "	South Africa	M	"
4	Crab meat .. "	Japan	BM	"
2	Dried fruit .. (mixed)	America	P	"
1	" .. "	South Africa	P	"
789	Eggs (whole frozen)	Australia	B	19 Unsatisfactory
21	Egg albumen .. (frozen)	Holland	B	1 unsatisfactory
2	Egg yolk (plain)	Canada	B	Unsatisfactory
2	Goldenberries .. (canned)	South Africa	M	Satisfactory
1	Granadillas .. "	South Africa	M	"
2	Grapefruit .. "	South Africa	M	"
1	" juice .. "	South Africa	M	"
3	Guavas .. "	South Africa	M	"
2	Ham (chopped) .. "	Denmark	B	"
2	Jam .. "	South Africa	Comp.PM	"
1	Loganberries .. "	South Africa	M	"
2	Luncheon meat .. "	Holland	B	"
2	" .. "	Australia	B	"
1	Mangoes .. "	South Africa	M	"
5	Margarine .. (fresh)	Holland	Comp.	"
3	" .. "	Norway	Comp.	Unsatisfactory
4	Meat loaf .. (canned)	Australia	B	Satisfactory
10	Oranges .. (fresh)	Spain	Th.	No trace
8	Oranges Mandarin (canned)	Japan	M	Satisfactory
1	" juice .. "	South Africa	M	"
6	Ox tongues .. "	Holland	S	"
1	Paw paws .. "	South Africa	M	"
13	Peaches .. "	South Africa	M	"
1	" .. "	Australia	M	"
1	" .. "	Japan	M	"
1	Pears .. "	Italy	M	"
2	" .. "	South Africa	M	"
2	" .. "	Australia	M	"
1	Peas .. "	South Africa	M	"
16	Peel (mixed dried)	Australia	P	Unsatisfactory
12	Pilchards .. (canned)	South Africa	S	Satisfactory
11	Pineapples .. "	Malaya	M	"
5	" .. "	South Africa	M	"
1	" .. "	Australia	M	"
2	Pineapple juice .. "	Australia	M	"
1	" .. "	South Africa	M	"
10	Pork kidneys .. "	Holland	S	"
2	Pork luncheon meat .. "	Denmark	S	"
4	" .. "	Holland	S	"
2	" .. "	Ireland	S	"
2	" .. "	South Africa	S	"
10	Raisins .. "	California	P	"
1	" .. "	Spain	P	"
2	" .. "	South Africa	P	"
7	Rice .. "	Holland	S	Unsatisfactory

Samples of Imported Foodstuffs (continued)

<i>No. of Samples</i>	<i>Description of commodity</i>	<i>Country of origin</i>	<i>Exam. for*</i>	<i>Result</i>
29	Salmon .. (canned)	Japan	M	Satisfactory
2	"	Canada	M	"
8	Sardines (canned)	Portugal	M	Satisfactory
2	Sauce (bottled)	Italy	S	"
2	Sauerkraut .. (canned)	Holland	S	"
4	Sausages	Denmark	S	"
1	Sausage skin (edible)	Canada	S	"
19	Shrimps .. (canned)	Norway	S	18 Unsatisfactory
16	Stewed Steak	Australia	S	Satisfactory
8	"	Ireland	S	"
2	" .. and vegetables ..	Australia	S	"
4	Strawberries	Holland	M	"
19	Sultanas	Greece	P	"
3	"	Turkey	P	"
2	Tea	India	S	"
87	Tomatoes .. (canned)	Italy	M	21 Unsatisfactory
6	Tomato juice	Italy	M	Satisfactory
4	" puree	South Africa	M	"
5	"	Italy	M	"
2	Tuna	Japan	S	"
4	Veal jellied	Denmark	S	"
16	Wheat	Canada	S	"
3	Youngberries	South Africa	M	"

<i>*Key</i>	<i>Examined for:</i>
B	Bacterial contamination.
C	Chemical contamination.
Comp.	Composition.
M.	Metallic composition.
P	Preservatives.
S	Soundness or Purity.
Th.	Thiourea.

Drinking Water Samples from Ships

<i>Name of ship</i>	<i>Result</i>
"Camerton"	Satisfactory
"City of Yokohama" (3 samples) ..	Unsatisfactory
"Medway" (4 samples) ..	Satisfactory
"Sandholm"	Unsatisfactory
"Steepholm"	Satisfactory
"Tahsinia"	Satisfactory

Frozen whole egg

Two consignments of this product from Australia, comprising 8,000 and 5,500 packages respectively, were discharged at Avonmouth Docks. Egg products of this nature are a common source of food poisoning organisms and it was considered advisable to obtain a 5 per cent sample of each consignment. To expedite the whole procedure and in order to shorten the detention period, group samples (a maximum of 5 samples to each sterile glass container) were taken from each batch. Tins of Australian frozen eggs are filled with the mixed egg in batches before cooling, each tin being marked with a factory number and a batch number which gives the number of the filling machine and the date of processing. This method of sampling proved to be a most satisfactory one, and had the advantage of reducing very considerably the amount of laboratory work, the time required to take samples and the number of sample containers brought into use. It was first developed at this port in 1956.

The first shipment of 8,000 tins was found to be free from harmful organisms. One batch of 76 tins in the second shipment contained *Salmonella Meleagridis*. The merchants concerned were requested to give an undertaking to have this batch, which is now under detention, processed at high temperature before being released to the trade.

Group sampling of a consignment of Dutch egg albumen showed that one tin contained *Salmonella* organisms (*S. Bareilly*). The affected tin was surrendered for destruction.

Formal action was taken in respect of the following consignments during the year:

Italian canned tomatoes

After preliminary inspection at the time of discharge, a high percentage of "blown" and "springer" tins were found in four shipments of this commodity. The consignees arranged to re-export two of these shipments to the country of origin. The other two were subjected to 100 per cent examination and 4,918 tins were rejected and destroyed. These goods arrived in the early part of the year and the merchants were advised to communicate with the exporters and refer to the faulty canning and processing of the tins. Inspection of subsequent shipments has shown that there has been a marked improvement.

Rice

A consignment of rice contaminated with the odour of phenols from a previous cargo carried in a ship's hold, was found to be unsuitable for human consumption. It was later released under guarantee for conversion into animal food.

Lard

As a result of gross contamination of a consignment of lard from the United States, reconditioning of about 500 x 56 lb. cases and condemnation of approximately 4 tons of this substance became necessary. After a guarantee had been obtained, permission was given for the rejected lard to be used for purposes other than for human consumption.

Apricot Pulp

A full examination was made of a consignment of apricot pulp because a high proportion of the tins were blown. This resulted in the condemnation of 488 tins of approximately $2\frac{1}{2}$ tons in weight. Five samples of the apparently sound tins were sent to the laboratory for examination and the contents of these were reported to be quite satisfactory but, as this commodity is liable to ferment, and possibly attack the tin linings during prolonged storage, the merchants were advised to hasten the disposal of the consignment to the trade.

Australian Mixed Peel

In October, 150 cases of Australian mixed peel (in $7\frac{1}{2}$ oz. polythene containers) were landed at Avonmouth ex m.v. *Middlesex*.

Eight packets were taken at random for sampling purposes and were found to contain sulphur dioxide in excess of the permitted quantity of 100 parts per million. Analysis showed that these samples contained sulphur dioxide in amounts varying from 150 parts per million to 230 parts per million. The shipment was detained.

Reconditioning was considered to be both uneconomic and impracticable at this stage. Further samples were taken after a month's storage and the

average content of sulphur dioxide was found to be slightly reduced. The product was released for distribution to the trade in mid-November, an undertaking having been given by the importers that they would make strong representations to the shippers and the country of origin, urging them to prevent a recurrence of this irregularity.

The incident once again focuses attention upon the anomaly of the law which permits the importation of some fruits containing sulphur dioxide in quantities up to 2,000 parts per million yet prohibits the importation of candied peel, consumed in very much smaller quantities, containing more than 100 parts per million sulphur dioxide.

Port Development

Various constructional projects have been put into operation, or completed during the period. Noteworthy among these are the following:

Completion of a large new mill for producing animal feeding stuffs by Messrs. British Oil & Cake Mills Ltd. This additional plant makes the production capacity of the firm's Avonmouth factory the largest in the world. They have also completed building a large delivery warehouse on reclaimed land forming the east bank of the River Avon.

The building of a new road bridge to span the railway lines and provide access from St. Andrew's Road to the existing oil installations and oil storage tanks now under construction to the eastward of Holesmouth, along the bank of the River Severn. This is nearing completion.

The quayside at "Q" shed berth in the Royal Edward Dock is in course of reconstruction. The surfacing of the quay is being done with sectional steel reinforced slabs.

There are prospects that within the next few years, there will be extensive industrial development at Avonmouth Docks. When these industries are working they will prove beneficial to the trade of the port, which will be a convenient terminal for handling the necessary raw imports and for exporting the finished products.

In the City Docks' area, a disused cake mill has been converted during the year into a multi-storied wine bond which is now considered to be the largest of its type in the port. Bottling facilities have also been installed.

Dock Sanitation

(a) Factory premises within the areas of the City Docks, Portishead Docks, Avonmouth Docks and at Chittening Estate, have been inspected periodically. It has been necessary to draw attention to unclean conditions in a few instances but, in general, the state of cleanliness and repair of the sanitary accommodation has been satisfactory. Although we are not directly concerned, it is of interest to refer to the excellent messroom accommodation which the Port of Bristol Authority have provided for outdoor staff who deal with permanent-way maintenance. These places have been fitted with the necessary sinks, hot and cold water supply and heating arrangements and the men are able to have their meals in clean surroundings.

(b) To ensure that the provisions of the Food Hygiene Regulations were being maintained, all food catering establishments, which are of the canteen-type at the docks, were visited regularly. Structural alterations, redecorating and re-equipping have been carried out in six of these during the year. Any minor irregularity noted during inspections was referred to the management and received prompt attention.

(c) Frequent inspections made throughout the year indicated that all the sanitary conveniences within the dock area have been kept clean and in good working order.

The site of the blitzed "F" Shed, City Docks, is now being used quite often as an open berth but it lacks adequate sanitary accommodation, as the original conveniences were bomb-damaged. The Port Authority has been approached concerning the provision of suitable and sufficient sanitary facilities at this berth and the matter is in hand.

(d) Some 6,000 lorry loads of ship, trade and general refuse weighing approximately 10,000 tons, were collected by the Transport and Cleansing Department's staff for controlled disposal. Their readiness to co-operate at all times, and the frequency with which collections were made throughout the year, have helped considerably in keeping nuisances to a minimum.

Miscellaneous

(a) Banana imports during 1957 were slightly higher than for the preceding year. In several shipments, small quantities of the fruit were found to be over-ripe on arrival at the port and could not be used for normal distribution to the trade. However, through the kindness and co-operation of Messrs. Elders & Fyffes Ltd., these were allocated to the various hospitals and institutions listed below:

Dr. Barnardo's Homes
Hortham and Brentry Hospitals
Health Department Day Nurseries
Corporation Children's Committee
Children's Hospital
Frenchay Hospital
Ham Green Hospital
Southmead Hospital
Muller's Homes

(b) Pigeons have so increased in number during the last few years, particularly at Avonmouth Docks, that they are causing serious concern to the Port Authority. They contaminate the surface of cargoes stored in warehouses and transit sheds, and foul buildings and surrounding ground in the vicinity of their roosting places.

"Feral" pigeons, as they are termed, are protected to some extent by legislation. Their destruction must, therefore, be by approved humane methods. Experiments are being carried out in the use of narcotics to destroy harmful birds of this type in industrial and similar premises but no licences have yet been issued to Servicing Companies for this purpose. It is to be hoped that such licences will be granted in the near future. If not, we are faced with a serious and ever-increasing infestation, which is already extending to premises beyond the Dock area.

THE WILLIAM BUDD HEALTH CENTRE

(August 1956 to December 1957)

Introduction

Since the Centre opened in August 1952, annual reports have been compiled from August to July yearly. An extension of the agreement between the Executive Council and the Corporation has been negotiated to cover a further seven years from July 1958. With the future so assured it is felt that the reports should come into line with those of other services and cover a calendar year. It has been necessary, therefore, with this report to extend the period under review for a further five months to the end of 1957.

Committees

The administrative machinery for the functioning of the Health Centre is quite simple, and has been laid down in the agreement between the Corporation and the Executive Council:

- (i) A Joint Advisory Committee comprising two representatives each of the Health Committee, Executive Council, Local Medical Committee and of the medical practitioners practising at the Centre. This Committee meets only as required and matters of general policy come within its purview although its recommendations need to be considered and approved by the parent bodies before they can be recommended.
- (ii) A House Committee to which has been delegated responsibility for the day-to-day functioning of the centre. This committee consists of the medical practitioners practising at the Centre, the Medical Officer of Health and an officer of the Executive Council.

Since last reporting, the House Committee have met formally on four occasions: the 17th September, 1956 and the 21st January, 22nd July and the 9th December, 1957. Between committees frequent informal discussions are held.

Staffing

(i) *Nursing*

Following Miss Padfield's departure overseas, Miss A. E. Balsdon took up her duties as Sister-in-Charge in September 1956. It is re-assuring to know that the happy relationships between the staff and the doctors at the Centre have continued uninterruptedly.

In March 1957, Miss M. M. Davies, the deputy, left for Canada, and fortunately Miss H. B. Wackett, a Clinic Nurse since August 1956, was ready to replace her. About the same time the other Clinic Nurse, Miss Callow, resigned, and in May 1957, Miss E. M. Charles and Miss M. Fawcett were appointed and soon settled in to complete an efficient and contented team.

(ii) *Lay*

On the secretarial and clerical side there have been fewer changes. Miss J. M. Palmer replaced Mrs. P. Harris as general duty clerk in April 1957, and in October of the same year, Miss E. M. Willies resigned on marriage, and Miss J. Taylor replaced her in a secretarial post.

(iii) *Night Porters*

During the past twelve months there has been much discussion as to the need for a night porter service. It is undoubtedly expensive to provide this night cover. But the Committee had to balance against the high cost of the night porters the psychological value of their presence to the residents on the

estate. Moreover, the absence of night porters would lead to unwarranted calls on the off-duty time of the nurses. In due course, therefore, and in spite of a recommendation to the contrary from the general practitioners, it was decided to continue the night-service.

Equipment

The equipment of the minor treatment surgery has been reviewed.

An electric cautery has been provided and is in fairly constant use especially for warts.

The lack of need to provide general anaesthesia has led to the withdrawal of the Walton anaesthetic machine which is now being used in the City's dental clinics.

A laryngo-pharyngoscope has been added to the equipment.

Good use of the electro-cardiograph has continued. The nursing staff have been trained to use the machine and interpretation of the results is made in association with a consultant physician. Consideration is now being given to the extension of the use of the electro-cardiograph to the doctors who work in the area but who do not practise at the Centre.

Special Services

(i) *Nutrition Clinic*

Total attendances at the Nutrition Clinic numbered 750 (181 new patients being seen). Most of these were referred because of obesity, although 37 were on account of gastric disorders, and 7 for infective hepatitis, while dietary advice was also requested for cases of diabetes, cardiac failure, cholecystitis, nephritis and anaemia.

In connection with parentcraft classes arranged at the Centre, the nutritionist has given regular talks on food values to groups of expectant mothers and has undertaken the individual dietary instruction and weight supervision of those who show symptoms which might precipitate toxæmia.

(ii) *Psychiatric Social Work*

During 1957 (the third year of psychiatric social work in the Centre) a new arrangement has been tried of fortnightly instead of weekly sessions. It is interesting to note that the actual *numbers of cases referred* have hardly dropped, i.e. 26 new cases referred (30 in 1956). This is an average of one new case per session. Meanwhile 61 "old" cases were still open and being worked mainly on a "supervisory" basis.

Sources of Referral :—

Health Centre G.P.'s	..	5
M. & C.W.	..	4
Health Visitors	..	11
Outside G.P.'s	..	6

Of the 17 children referred the reasons were varied. Five enuresis—of whom three referred to a psychiatrist-physician were found to have an organic cause for the symptoms. The remainder of referred symptoms included temper tantrums, nervous tics, sickness at school, feeding troubles, and one with acute fears of death following an accumulation of deaths among friends and relations.

Of these children, three referred by G.Ps. outside the Centre were adolescent girls with anxieties connected with school work and/or puberty. These were relieved by discussion and advice in handling the situations.

This year nine adults were referred on their own. The recurring theme has been mainly concerned with their unsatisfactory marriages. Sometimes, where the partners are extremely immature and often incompatible it seems to be impossible to solve their problem.

Various states of mild depression and anxiety continue to be presented in women patients—for instance, anxiety over work, over fears of pregnancy, and over the marriage—and one case of post-puerperal depression.

The work is inevitably rather more superficial with two-weekly intervals and where patients lose touch by failed appointments it is very difficult to re-establish contact. There is no response to letters of enquiry, and quite a big proportion of patients do fail appointments, failing to come at all or not turning up after the first time. This occurs even when health visitors have made special visits.

Disposal of cases by December 31st. 1957 was as follows:—

- 8 cases seen once only.
- 1 referred to Child Guidance Clinic.
- 4 referred to psychiatric out-patients.
- 1 moved from Bristol.
- 3 improved (closed).
- 9 supervision (still open).

It seems clear that much of the work in this area can only be done by close contact of frequent visits and work *in* the home. The case-load of the health visitors is such that it is impossible to visualise their being able to do still more than they are doing. Some of these families are not severe enough to be referred to a special health visitor as “problem families.” It would seem that the most hopeful line might be opened up through the work of the kind achieved by the Family Service Unit or by the City’s extending mental health service.

But where cases with a definite “psychiatric angle” have been referred it seems fair to claim that they have received the kind of help which can be given by someone with P.S.W. training.

(iii) *Surveys*

An “Inquiry into preference for a place of confinement” is nearing completion and a survey of “Referrals for X-ray” starting. The possibilities of commencing a survey on children’s minor ailment treatment are being discussed.

Developments

During the year the Health Committee and other interested bodies again approached the South Western Regional Hospital Board to provide radio-diagnostic and pathological facilities at the centre. After due consideration the Board re-affirmed its decision, that as a matter of policy it was not in favour of the establishment of small departments of pathology and radiology at health centres.

The Board again turned down a request of the House Committee for the services of a consultant physician.

The Future

There now seem to be few possibilities of immediate future developments at the Health Centre. The service functions smoothly and well, but all those working at the Centre believe a greatly strengthened and improved service could be given to the people by providing:—

- (i) A dental suite for local authority and Part IV services.
- (ii) A diagnostic X-ray service.
- (iii) Facilities for simple clinical pathological investigations.
- (iv) A consultant physician.

It is going to be many years before the Regional Hospital Board can provide a hospital in South Bristol. In the absence of the facilities outlined above the people in Knowle West will still have to lose much time from work

and travel fairly long distances to the other side of the City for examinations and treatment which could be provided quite easily in the area.

Surely health centres upon which so many hopes had been based when the National Health Service was planned still seem to be the most promising method of combining medical services in the most efficient and economical way. Much criticism has been levelled at the high cost of health centres but if they were planned for use by all the health, welfare and social service workers the costs per itemised service to the patient would not be so appreciably heavy.

General Practitioner Work

(a) At the end of 1957, there were 11,825 patients registered at the Centre, an increase of 445 since the last report.

(b) *Patients' Attendances at the Centre*

Table I shows the attendance by each quarter for each general practitioner firm for 1955/56 and 1956/57.

TABLE I
Attendances by each Quarter for General Practitioner Firms at the William Budd Health Centre

Doctors	1st		2nd		3rd		4th		Totals		1957 cont. 29.7.57 to 28.12.57
	July 30 27 Oct. 1956	Aug. 1 29 Oct. 1955	29 Oct. 31 26 Jan. 1957	31 Oct. 28 28 Jan. 1956	28 Jan. 30 27 Apr. 1957	30 Jan. 29 28 Apr. 1956	29 Apr. 30 27 July 1957	30 Apr. 28 28 July 1956	1956- 1957	1955- 1956	
A ..	3,509	3,061	3,485	3,455	3,627	3,717	3,257	3,295	13,878	13,528	6,100
B ..	421	447	474	463	546	518	413	429	1,854	1,857	872
C ..	2,394	2,185	2,352	2,356	2,512	2,376	2,021	2,026	9,279	8,943	4,170
D ..	1,095	1,128	1,045	1,152	1,127	1,252	898	1,016	4,165	4,548	1,912
E ..	1,306	1,194	1,398	1,346	1,403	1,492	1,363	1,309	5,470	5,341	2,641
Totals	8,725	8,015	8,754	8,772	9,215	9,355	7,952	8,075	34,646	34,217	15,695

(c) *Minor Surgery Treatments*

Table 2 shows the volume of work undertaken by the nursing and medical staff in the minor surgery theatre.

TABLE 2
Treatments given for General Practitioners at the William Budd Health Centre

Doctors	1st		2nd		3rd		4th		Totals		1957 cont. 29.7.57 to 28.12.57
	July 30 27 Oct. 1956	Aug. 1 29 Oct. 1955	29 Oct. 31 26 Jan. 1957	31 Oct. 28 28 Jan. 1956	28 Jan. 30 27 Apr. 1957	30 Jan. 29 28 Apr. 1956	29 Apr. 30 27 July 1957	30 Apr. 28 28 July 1956	1956- 1957	1955- 1956	
A ..	678	808	609	564	577	460	1,243	600	3,107	2,432	3,131
B ..	56	58	20	18	26	18	76	41	178	135	359
C ..	363	656	387	472	495	390	718	307	1,963	1,825	1,366
D ..	22	74	22	28	33	42	100	26	177	170	184
E ..	178	272	218	200	227	193	442	214	1,065	879	861
Totals ..	1,297	1,868	1,256	1,282	1,358	1,103	2,579	1,188	6,490	5,441	5,901
Schools	77	125	158	72	146	54	187	72	568	323	384
Casuals	97	71	26	32	84	35	330	47	537	185	815
Full Total	1,471	2,064	1,440	1,386	1,588	1,192	3,096	1,307	7,595	5,949	7,100

Include electro-cardiograms and other treatments with recently acquired equipment.

(d)

TABLE 3**General Practitioner—Maternal and Child Welfare work**

			<i>Aug. 1955– July 1956</i>	<i>Aug. 1956– July 1957</i>	<i>July– Dec. 1957</i>
Sessions	..	..	150	180	75
Mothers attended	..	..	1,039	1,409	602
Average	..	..	6.8	7.8	8.0

(e) *General Practitioner—References to Hospital Specialist and Diagnostic Units***TABLE 4****Number of patients referred to Hospital Specialists
(All doctors)**

<i>Months</i>	<i>Orthop.</i>	<i>Paed.</i>	<i>Phys.</i>	<i>Surg.</i>	<i>E.N.T.</i>	<i>Gyn.</i>	<i>Total</i>
Aug. 1956 to July 1957	143	62	307	190	254	133	1089
Aug. to Dec. 1957	45	7	107	59	108	55	381
Aug. 1955 to July 1956	93	58	407	224	241	179	1202

TABLE 5**Patients referred to Hospital Diagnostic Units
(All doctors and Local Authority)**

<i>Months</i>		<i>Chest X-ray</i>	<i>Haemo- globin</i>	<i>Blood Count</i>	<i>E.S.R. B.S.R.</i>	<i>Urine</i>	<i>Total</i>
Aug. 1956 to July 1957	..	112	271	6	—	127	516
Aug. to Dec. 1957	..	62	77	—	—	112	251
Aug. 1955 to July 1956	..	252	152	37	—	174	615

Local Authority Work(a) *Maternal and Child Welfare***TABLE 6****Maternal and Child Welfare**

			<i>Aug. 1955– July 1956</i>	<i>Aug. 1956– July 1957</i>	<i>July– Dec. 1957</i>
Medical Officers session			52	49	20
Mothers attended	..	..	427	535	167
Average	..	..	8.0	10.9	8.3
Midwives sessions	..	..	50	51	20
Attendances	..	..	603	528	169
Average	..	..	12.0	10.3	8.4

(b) *School Health***TABLE 7****School Health**

			<i>Aug. 1955– July 1956</i>	<i>Aug. 1956– Dec. 1957</i>
School doctors' sessions	..	..	73	92
New children	..	..	572	12
Attendances	..	..	814	1040
Average	..	..	11	11

HEALTH EDUCATION

P. Mackintosh

(Health Education Officer)

As forecast in last year's report, the Home Safety Council has lived up to its early promise, and has proved to be an extremely active organization. In order to keep the Health Committee fully informed of home safety activities, a report is submitted every six months and the two reports covering 1957 are reproduced as an Appendix at the end of this section.

"Housework with Ease"

Without doubt, one of the highlights of the year was the organizing of the conference and demonstration "Housework with Ease". As mentioned in the Appendix, this meeting arose from a suggestion made by Miss Clarkson of the Central Council for Physical Recreation, and it seems to be worth putting on record the thoughts and discussions which preceded the event.

It is a recognized fact that the public health service has an exceptional opportunity for true health education and the promotion of health, but all too often the opportunity is not being grasped. Whilst there will always be great scope for work in the field of health education in such branches as the Maternal and Child Welfare Service, the School Health Service, the Environmental Health Service, there is no service which caters for the hard core of the adult population—those people whose only contact with any form of health worker is usually the visit to the doctor or hospital, when he or she is ill or has suffered an accident. In general, little is being done to encourage a very large proportion of the population to remain healthy and well and enjoy life to the full. Health education of the young, trying to inculcate healthy habits in childhood is well worthwhile, but rather long term. What of the people now reaching middle-age who have acquired bad not good habits? Can anything be done for them? With improved living conditions and excellent medical services, people are living longer; but are they able to enjoy their additional years, or are their last years made miserable with minor ailments and afflictions which might possibly have been avoided if the people had been taught certain things about their health earlier in life?

Today, the dreaded diseases of thirty or so years ago have been virtually conquered. Diphtheria, smallpox, tuberculosis and other diseases which were the scourge of early childhood have been practically wiped out. The whole pattern of disease has changed: "diseases of the stomach and duodenum have assumed greater importance, whilst "hypertension", not recognised as a clinical entity 50 years ago, is now sixth in the list of factors causing death in the 45 to 64 age group. Neoplasms, cardiac disease and vascular lesions of the central nervous system are now the three leading causes of death," and it is in the middle-aged group of the population where the incidence and mortality rate is highest.

Considering facts such as these it becomes evident that within the middle-age and old-age groups of the population, there is a tremendous field of work for health education. But apart from any short-term programme of health education for those who have already achieved middle-age or old-age, there must be a long-term programme for the younger elements of the population—for those in their 20's or 30's—a programme which would really be a preparation or education for middle-age and old-age. People need to be taught how to prepare their minds and bodies for the natural physiological changes which take place

as their lives progress. They need advice on how to adjust themselves to these changes, and this advice would also include information on the use of one's leisure. Such advice will help in bringing about a gradual mental and physical adjustment from middle-age to old-age and may offer the best prospect for healthy longevity.

With thoughts such as these in mind, it was decided to call together a number of people in order to discuss the topic. The informal gathering consisted of the Medical Officer of Health, two orthopaedic surgeons, a psychiatrist, a psychologist, the physical education organisers of the Education Department, the lecturers in physical education from the University, several physiotherapists and the chief nursing officer of the Health Department. The meeting was extremely useful, several good proposals being put forward which would form the basis for future work. It was generally agreed that the Health Department could do a great deal to encourage and promote a more healthy way of life for individuals; whilst it was recognized that there was a great need for something to be done quickly for the middle-aged element in the community, it was thought that in the first instance we should see what interest could be aroused among the women rather than the men. It was felt too that an attempt should be made to do something for the housewife; she is the pivot around which the family revolves, and anything that could be done to make her life easier may be reflected in the other members of the family.

On 18th October, the Department organized a conference and demonstration in the Museum Lecture Theatre. The meeting was called "Housework with Ease" and two sessions, one in the afternoon and another in the evening, were given. Admission was free and nearly 800 women attended. The Chair was taken by Miss Eve Clarkson, a Senior Representative of the Central Council for Physical Recreation. The first speaker was the Medical Officer of Health, who pointed out to the audience the contrast between the health conditions in which their grandparents had had to live, and those of today, so far as housing and environment were concerned and the amenities of existence. However, much still remained to be done particularly in the prevention of minor ailments and disabilities and the Health Department could help by co-operating with and encouraging such organizations as the Central Council for Physical Recreation, youth clubs, athletic clubs and sports clubs, etc.

Mr. Keith Lucas, an orthopaedic surgeon, followed, and he pointed out that "housework with ease" meant housework without backache, neuritis and the mental exhaustion which is so popularly referred to as neurasthenia. He thought that all housewives were overworked in the circumstances of the present day, because of social changes and the lack of domestic help. Physical aches of housework arose, largely because the human race was not designed to do it, nor were human muscles efficient for what he called "fixation positions". He said that his work as an orthopaedic surgeon, which 25 years ago was concerned with the treatment of such conditions as osteomyelitis, tuberculosis, rickets, and so on, was now ninety per cent dealing with disabilities arising from over-strain of the neck and back. One important feature of the problem of backache, was the correct height of working surfaces with which the housewife was concerned, which should in his view be approximately 20 inches below the shoulders. Women too should learn to sit to their work, so that they could keep a straight back and at the same time be in a relaxed position.

Miss Doris Robertson of the Scottish Council for Physical Recreation then followed with a demonstration of "housework with ease". The stage of the lecture theatre was "furnished" with many items of household furniture and equipment, most of which had been willingly provided by the South Western Gas Board. Miss Robertson first performed a wide range of household tasks

the "wrong way" at the same time enquiring of the audience if that was how they did each thing. She then proceeded to do the same tasks, only this time she used the natural hinges of the body—the knees and hips—and paid considerable attention to the positions of the feet, the elbows and the shoulders. This very effective and graphic demonstration was well received by the audience.

The meeting concluded with a short talk by Miss Cooke, Principal Physiotherapist at the Bristol Royal Infirmary, on the need for relaxation and a demonstration of relaxation techniques, ably carried out by Miss Shotton, a physiotherapist at the Bristol Royal Infirmary.

At the end of each meeting, the audiences were told that if they wished to learn more about the lifting and handling and relaxation techniques, they should inform the Health Department. The Health Committee realized that a need for this knowledge existed, and very readily agreed to employ a physiotherapist for one afternoon each week, to take classes. Within a matter of days, requests for tuition began to arrive in the Department. Not all those asking for tuition could attend in the afternoon, so it was decided that evening classes as well should be arranged. Early in December the evening classes commenced and these were conducted voluntarily by Miss Clarkson, Miss Cooke, and two of her assistants, Miss Shotton and Miss Buston. Afternoon classes started during the same week and these were taken by Mrs. J. MacLaren, a physiotherapist from the Health Department. The classes have continued into 1958 and at the time of writing, it can be said that the venture has been an undoubted success.

The project has been written up here in some detail, because it is in some ways unique, and although the techniques which are taught may not be new, it is the first instance of a Health Department embarking on this type of health promotion. If health education is the teaching of a way of life, this scheme represents only one lesson in that educational curriculum. But it is a lesson which could develop considerably; it would be desirable, for example, if some such form of teaching could be extended to the male population. After all, in many branches of industry, the male employees are taught the correct ways to handle and lift equipment and the tools which they use; we are merely trying to adapt these same principles for the housewife, working in her "factory"—the home.

Health education of this nature is, of course, a short term policy. For any lasting benefits, any teaching of this nature—as indeed all health teaching—must be done with the younger members of the population. It is only by instilling good habits when persons are young, that they remain with them for the rest of their lives.

Refresher Courses

The annual refresher course for Public Health Inspectors was held from 27th to 30th March, at Rodney Lodge, Clifton. The course was open to members of the South Western Centre of the Public Health Inspectors' Association and as usual, was well attended. Among the papers presented were:

"Parasites of Public Health Importance"

"One Hundred per cent Meat Inspection"

"Principles of Combustion and Avoidance of Smoke and Grit Emission"

"Oil Firing of Boilers and Furnaces"

"Measurement of Atmospheric Pollution".

Visits were made to the boiler plants at J. S. Fry & Son's Ltd. factory at Keynsham and also to the plants at the Co-operative Society's laundry, dairy and bakery departments.

The refresher course for Mental Health Officers was held from 1st to 5th April, at Clifton Hill House. The programme covered a wide field and details appear in the section of this Report on the Mental Health Service.

The arrangements with Glamorgan Health Department for the "exchange" refresher course for health visitors were discontinued in 1957. The Women Public Health Officers' Association held their Autumn School in Bristol in September and eight of our health visitors attended.

From 25th March to 5th April, the School Health Group of the Society of Medical Officers of Health arranged a refresher course for school medical officers and this was held at Wills Hall. Details of this course appear in the School Health Service section of this Report. During this same period, Dr. John Burton and Mr. Lynton Porter, of the Central Council for Health Education, visited Bristol for one day. During the morning they lectured on Health Education to the heads of the boys' secondary modern schools and in the afternoon attended the school medical officers' course. On 14th May, another member of the Central Council's staff, Dr. Dalzell Ward, came to Bristol and lectured to heads of schools, on "Sex Education in Schools". In June, Mrs. Duncan, also of the Central Council gave an intensive one-day course to volunteers, designed to train them as speakers on Home Safety. The following day, in the morning she gave a lecture and demonstration on "The Effective Use of Posters and Leaflets" to Clinic Sisters; in the afternoon she lectured on Home Safety to a large group of home helps.

Exhibitions

It is the policy of the Department to keep health education constantly in the public's mind. This is being done to a great extent by the very many talks which are given each year by members of the staff and the volunteers on the Home Safety panel of speakers. A considerable contribution is made by the regular display of health education material in places where members of the public gather. In January, an exhibition was held in the Y.M.C.A., dealing with pre-packed foodstuffs. The exhibition was arranged by a firm which manufactures hygienic food packaging material, and the Health Department's stand formed the central exhibit. This aroused considerable interest and later in the year, the exhibit was again shown in the windows of the Co-operative Society's Store in Castle Street and also in Radiant House, the headquarters of the South Western Gas Board. In February an exhibit on Clean Air was displayed in Radiant House for two weeks; the following month, this was transferred to the windows of Messrs. Rowe Brothers, manufacturers of household equipment. In September, a new type of exhibition stand was erected at the Horticultural Show. This exhibition dealt with the prevention of accidents in domestic gardens. During the National Home Safety Week in November, a small exhibit dealing with the prevention of burns and scalds was displayed in the window of the Information Bureau on the City Centre.

In this exhibition work, and in the spreading of health knowledge generally, one must pay tribute to the tremendous amount of help given and the readiness to co-operate by many organizations and individuals in the City. The three local newspapers and the Western Region of the B.B.C. are always ready to co-operate, and throughout the year have given a splendid coverage on health education matters. Authorities like the South Western Gas Board and South Western Electricity Board have readily given space for exhibitions and these, together with some of the large stores and many individual shopkeepers, cinema managers, the City Librarian and the Chief Constable have all assisted in publicising health education activities. This spirit of friendliness and willingness to co-operate does much to make those responsible for organizing health education feel how worth-while the work is.

Visitors

During the course of 1957, the Department received 46 professional visitors from other countries, including doctors, nurses, public health inspectors, social workers and administrators. The benefits gained were by no means one sided for the interchange of ideas is of great value to members of the Department. The visitors were in the Department for varying lengths of time; most of them spent two weeks, several had programmes covering a period of four weeks. The visitors came from the following 26 countries:

Afghanistan, Austria, Borneo, British Guiana, Burma, Denmark, Eire (2), France, Germany, Holland (2), Indonesia, Italy (2), Jamaica, Japan (6), Korea, Malaya (5), Malta, New Zealand, Norway, Singapore, Sudan (7), Thailand, Trinidad, Turkey, U.S.A., and Yugoslavia (3).

Monthly Bulletin

The Monthly Bulletin of the Medical Officer of Health continued to appear throughout 1957. This was the second complete year of this Bulletin and it is proving increasingly popular: the circulation is now over 600 copies each month.

APPENDIX

Home Safety—First Report to the Health Committee, 23rd July, 1957

In accordance with the Health Committee's resolution of Minute No. 192 of 18th December, 1956, a meeting was held at the Central Health Clinic on 30th January, 1957, to which were invited representatives of those organizations which had agreed to serve on a Home Safety Committee. The Chairman of the Health Committee, Alderman J. J. Milton, O.B.E., J.P., took the Chair, and representatives from 28 organizations as well as the Health Committee and Health Department were present.

By the end of June, the Home Safety Council had met on two occasions and the Committee had held four meetings. These first six months have been a period during which a good deal of discussion has taken place: Council and Committee members have got to know each other and already it is evident that representatives of the many organisations on the Council can operate as an effective team in campaigning for the prevention of accidents in and around the home. During this period Dr. P. G. Roads (Deputy Medical Officer of Health), Mr. Fitzgibbon (Plastic Surgeon, Frenchay Hospital) and Dr. A. L. T. Beddoe (General Medical Practitioner) have been co-opted to the Committee; four other organizations, the Bristol City and Marine Ambulance Corps, the Bristol Jewish Women's Guild, the Mothers' Union and the W.V.S., have accepted invitations to be represented on the Council.

Some of the activities of the Home Safety Council and Committee are listed below.

1. The Chairman, the Secretary and Mr. Rogers (South Western Gas Board) met a representative of the Housing Department and discussed the present arrangements for fixing fire-guards in Corporation houses. As a result there will be closer co-operation between the Housing and Health Departments regarding the fixing of hooks for fireguards. The Home Safety Council's representatives were assured that tenants would be given permission to plug the walls to take hooks for fixing the guards in position: it was made known too that in all future contracts placed by the Housing Department, the fire-places specified would contain special plugs drilled into the tiled face to which the new B.S. fireguard could be fixed.

2. It was learned that the Corporation proposed to produce a Tenants' Handbook. For the time being, production of this booklet has been held up, but the Home Safety Council have offered to provide a "safety hints" section for the publication and it is likely that the offer will be accepted.

3. In order to establish a panel of speakers for the Home Safety Council a one-day training course was held on 19th June. This course was arranged through the good offices of the Health Department; Mrs. Duncan of the Central Council for Health Education conducted the course which was one of the in-service training courses provided free to local authorities. By kind permission of the South Western Electricity Board, the course was held in the Demonstration Theatre of Electricity House. A good deal of interest was aroused, over 60 people attending. One of the results has been that we now have a panel of 20 speakers, whom we can call upon to speak on Home Safety.

4. A representative of the manufacturers of "Proban", a flame proofing method for materials, has been invited to give a talk and demonstration to the Home Safety Council in July. The Home Safety Council will endeavour to encourage the wider use of such materials.

5. The Home Safety Council takes pleasure in recording the following information supplied by the South Western Gas Board.

- (a) The Board provides an "on request" maintenance service free of labour cost, to ensure that gas appliances are maintained at the highest standard of efficiency.
- (b) The Board provides a special service for old people living alone, whereby appliances and installations are inspected.
The Board welcomes information from local organizations who could provide the names and addresses of old people living alone.
- (c) The Board can supply guards for existing gas fires at an inclusive price, including fixing of 10/- per fire.

6. In October, the Physical Education Association are organizing a Keep Fit Rally, in Bristol. The Home Safety Council will have the opportunity to publicize its activities. It has been suggested that some topic such as "The Cumulative Strain of Housework as a Cause of Home Accidents" may be discussed and demonstrated.

7. Practically every home in Bristol have some drugs and medicines kept in cupboards, medicine chests or just lying around on shelves. Many of these are a potential source of danger, in that if taken by small children, would result in serious illness and possibly death. The Home Safety Council feels that this danger should be removed and that a campaign should be started to encourage householders to "empty their medicine chests" of surplus drugs and medicines. It is hoped that all chemist shops will take part in this campaign and the Home Safety Council have approached the Pharmaceutical Society for assistance in this matter.

8. Fireguards for solid fuel fires. Enquiries made with local manufacturers of fire-guards have revealed that no guards are being made to the B.S.2788, 1956 specification. The Council has received the addresses of a number of firms in the Birmingham area which are manufacturing these new guards and this information will be passed to the appropriate quarter.

9. The Home Safety Council has asked the Horticultural Committee for free display space at the Horticultural Show in September. The application has not yet been finally approved but it is understood that approval will most likely

be granted. The intention is to arrange a small exhibition dealing with accidents which occur in the garden, emphasising those things which should be done in order to prevent such accidents. Appropriate literature will be displayed and it is hoped that permission will be given for copies of the prevention of accident handbook, to be put on sale. Members of the Townswomen's Guilds have volunteered to staff the exhibition stand.

10. The handbook, referred to above has been produced by the Royal Society for the Prevention of Accidents. One thousand copies of these booklets were purchased in March and the Royal Society agreed to the wording "Bristol Home Safety Council" appearing on the front cover. Copies were issued to Health Visitors and other Health Department Staff, who could bring this handbook to the attention of the general public. Members of the Home Safety Council offered to sell copies to members of their own organizations as well as the general public and by the end of June, 590 copies had already been sold and a further 268 were out on sale or return. From this, it appears likely that further quantities will be required for sale to the public.

Home Safety—Report to Health Committee, 4th February, 1958

The Bristol Home Safety Council has now been in existence for one year. On the 23rd July 1957 a report on the first six months' activities of the Council was presented to the Health Committee, and members of that Committee expressed their satisfaction at the way in which the Home Safety Council was tackling the problem of the prevention of accidents in the home. Since the last report to the Health Committee the Home Safety Council has met twice, and the Home Safety Committee have held four meetings. The activities of Council and Committee since July 1957 are listed hereunder.

1. In September 1957 the first attempt was made to put on an Exhibition in which members of organisations represented on the Home Safety Council could take an active part. The Horticultural Committee of Bristol Corporation very kindly granted free exhibition space at the Horticultural Show held on the Downs, and the Health Committee approved the expenditure of £20 for display material. The exhibition put on, dealt entirely with the prevention of accidents in the garden. Members of the Townswomen's Guilds volunteered to staff the stand, and distributed propaganda material to members of the public. A number of Home Safety Handbooks were sold. The local press singled out the exhibition for individual mention in the accounts of the Show which were published. A note regarding this Exhibition appeared in "Safety News" and as a result Slough Home Safety Association wrote asking for details.

2. There is a good deal of evidence to suggest that physical and mental strain is frequently responsible for causing accidents in the home. Anything that can be done to relieve such strain can be regarded as a preventive measure against accidents. Physical strain is often increased by incorrect methods of handling and moving. The Health Committee agreed to a suggestion by the Medical Officer of Health that a conference and demonstration should be arranged to explore this matter, and on Friday, 18th October 1957, a meeting entitled "Housework with Ease" was held at the Museum Lecture Theatre. About 800 women attended, and, as a result, the Health Committee agreed that classes should be held at which housewives could be taught relaxation exercises, and correct techniques of lifting and handling. Four such classes were held in December 1957 and afternoon and evening classes recommenced on 15th and 21st January 1958.

3. A further opportunity was taken to publicise Home Safety at an Occupational Therapy Exhibition held by the Regional Hospitals Board at the Victoria Rooms on 14th and 15th October 1957. A small stand of peg-board panels was erected and appropriate accident prevention posters and leaflets were put on display.

4. The Home Safety Council agreed to take part in the National Home Safety Week which was observed from November 4th to 9th 1957. It was decided that the main emphasis of the week's campaign should be on the prevention of burns and scalds in the home. Shops, stores, cinemas, police stations, were some of the places where publicity material was displayed. The Home Safety Council would wish to record here the sincere appreciation of its members to all those organisations and individuals who took part, and whose efforts contributed so much to the success of the campaign. This was the first time that the Home Safety Council had organised such an effort, and although it was initially regarded as something of a "pilot" venture, there now seems little doubt that the Council achieved a successful result.

5. The Christmas period seems to be one when the incidence of home accidents tends to increase. Members of the Council distributed posters on the dangers of accidents during Christmas festivities; these were delivered to shops, schools and clinics, and both local evening papers published full-scale articles on the subject. It is pleasing to note that no serious home accidents were reported in Bristol over the holiday period.

6. The panel of speakers on Home Safety, set up after the One-day Training Course in June 1957, is becoming increasingly active. All local organisations likely to be interested were notified in the Autumn of the existence of the panel, and requests for speakers have come in steadily. The Council records its gratitude to its speakers, who do their work most ably, and who have found their audiences interested and appreciative. In addition to talks on Home Safety given by members of the Health Department, eleven talks have been given by members of the panel, and eleven future bookings have been made. Speakers are often asked to give further talks at a later date.

7. The sales of the Home Accident Handbook have continued during the period under review ; 230 copies have been sold since July 1957 and a further 220 are out on "sale or return".

8. The Council note with pleasure the interest and co-operation of the local press. Special articles have appeared from time to time, and a continuous series of "Home Safety Hints" have appeared over some months.

9. The Council is pleased to report that the Health Department is now issuing the British Standards Fireguards under their loan scheme, and that in the case of Corporation owned dwellings the Housing Manager is arranging the necessary fixing.

10. It is gratifying to know of the co-operation of the Local Authority. Existing inadequate guards are being replaced on 1,989 electric wall fires and 13 gas fires installed in Corporation houses built immediately after the War. Replacements are of British Standards guards, and the cost of 10/- per guard will be met by the Corporation.

11. The Bristol Home Safety Council is now affiliated to the Royal Society for the Prevention of Accidents, and members of the Council attended the National Safety Congress. A report was made on the special Home Safety session.

12. "Home Safety" has been included as part of the subject of housecraft in the new school-leaving examination which the Education Committee is offering to pupils at secondary modern schools.

13. At a Council meeting in October 1957 a helpful and informative talk was given by Mr. H. K. Bourns, F.R.C.S., Consultant Surgeon, United Bristol Hospitals, and the members desire to place on record thanks to other members of the medical profession whose advice and help is so readily given.

Forthcoming activities

Plans are in hand for a special Home Safety week, April 14th—19th. During this period the public will be asked to clear their medicine chests, disposing of old and unwanted materials, and returning clean bottles to their chemists. Stress will be laid upon the danger to young children of dangerous drugs and pills being left where they can be handled and perhaps swallowed. The week will open with a talk at the Bristol Rotary Club by Dr. T. E. Oppé, M.B., M.R.C.P., D.C.H., Lecturer in Child Health, University of Bristol.

All chemists in the City will be supplied with posters and propaganda material, and it is hoped that many will make special displays. Medical practitioners will be asked to co-operate also.

THE DISEASES OF ANIMALS ACT

Lt.-Col. D. I. C. Tennant, M.R.C.V.S.

(Inspector under the Diseases of Animals Act)

Swine Fever Order 1938

The year has passed without an outbreak of this disease within the City limits. There were, however, two outbreaks in the neighbouring County of Somerset, among market pigs with possible contacts in the City. A very careful check of all in contact was made and movement restrictions imposed on the premises involved. These were removed as soon as the 28-day incubation period had passed without incident.

Movement of Swine Order, 1952

The movement of pigs from markets under this Order shows a slight decline on that of last year and reflects the general falling off of pig keeping in the country as a whole.

During the year 542 store pigs and 18 sows with litters were licensed out of Bristol Cattle Market. In the same period 5,863 pigs arrived in the City and were inspected during the isolation period of 28 days.

Fowl Pest

No outbreak occurred during the year.

Tuberculosis (Area Eradication) Order

The eradication of bovine tuberculosis in the country is proceeding as scheduled. The M.A.F. & F. report that 67 per cent of all herds in the country are now attested. The City of Bristol with the neighbouring County of Gloucestershire are scheduled as Eradication Areas for March 1959, and the Ministry hope to have the whole country clear by 1962.

This Order will do much to safeguard the supply of raw milk and should go far to eliminate the condemnation of carcase meat from this cause.

Foot and Mouth Disease

The year has again been one in which the disease has been widespread throughout the country. Although no outbreak occurred in the City, there have been outbreaks in the County of Somerset during the autumn, placing the City under movement restriction. During the period 2,386 licences were issued from this office, for the movement of animals for slaughter, and breeding.

Importation of Dog and Cat Order

No incidents of dogs and cats straying from ships in the Docks were reported during the year. The need for suitable kennel accommodation in the Dock area is still a necessity, as there is no place where dogs and cats may be impounded should they stray from foreign ships.

CIVIL DEFENCE RESPONSIBILITIES OF THE MEDICAL OFFICER OF HEALTH

DR. H. TEMPLE PHILLIPS

(Chief Assistant Medical Officer of Health)

and W. J. C. WINTERSON

The Civil Defence responsibilities of the Medical Officer of Health have not materially altered during the year, although the problems arising from the advent of nuclear warfare, and the revision necessary in planning to cope with such an eventuality, have continued to exercise the minds of the officers to whom specific civil defence responsibilities have been delegated.

Dr. P. G. Roads, Deputy Medical Officer of Health, attended a study course for Medical Officers of Health at the Civil Defence Staff College at Sunningdale from 15th to 20th September. This concerned itself primarily with the tactical role of Medical Officers of Health in the event of a thermo-nuclear war.

Dr. H. Temple Phillips, Chief Assistant Medical Officer of Health, and Mr. R. F. F. Wood, Chief Ambulance Officer, attended a Senior Ambulance Officers' Course at Sunningdale from 8th to 12th July. The object of the course was to explain, against a Civil Defence background, new plans for the hospital and first aid service in war-time, with particular emphasis on the ambulance side, to those officers who would be responsible for the administration and operational control of the Ambulance and Casualty Collecting Service.

Civil Defence Instructors

The decision of the Civil Defence Committee to agree to a recommendation of the Health Committee earlier in the year for the appointment of a full-time Ambulance and Casualty Collecting Section Instructor was implemented on the 1st July, when Mr. R. F. Turner took up his duties in the Department. This will enable more time to be devoted to the detail which is inherent in presenting an interesting and comprehensive programme.

Mr. Turner attended an Ambulance Section Instructors' Course at Falfield from 18th to 30th November, and was awarded a special certificate which qualified him to examine, as well as to instruct, local instructors, in addition to training members of the Ambulance Section in their specific duties.

Mr. H. J. Willies, the Station Officer in charge of the Bedminster Sub-Division, attended an Instructors' Course at Falfield from 25th Feb. to 9th March, when he qualified as an Instructor and received a pass certificate.

A Local Instructors' Course for members of the Ambulance and Casualty Collecting Section was held in Bristol during May. The Course was conducted by Mr. E. G. Joy, Deputy Chief Ambulance Officer, assisted by Messrs. Mountjoy and Willies, volunteer Station Officers, and Mr. V. Gosling, a Station Officer in the City Ambulance Service, and was attended by two full-time officers of the Ambulance Service and six voluntary members of the Ambulance and Casualty Collecting Section. All qualified in the subsequent examination, which has helped considerably in raising the standard and extent of training.

The position now is that the department has, in addition to the full-time Instructor, four centrally-trained and eight locally-trained Instructors.

Ambulance and Casualty Collecting Section

The enrolled strength of the Section at the end of the year was 686. Due to non-attendance for training, a large number of these are no longer considered effective and the Civil Defence Committee, acting under instructions from the Home Office, are taking steps to deal with the situation.

Regular training has continued throughout the year at the six Sub-Divisions situated in various parts of the City. That for Knowle had been carried out in the Civil Defence Sub-Control Centre at Broadfield Road, but those premises had not proved ideal for the purpose. It was decided, therefore, to transfer to the Knowle Health Clinic for training purposes.

During the year five ambulances were acquired from the City Ambulance Service. Two of these replaced vehicles no longer considered roadworthy, whilst the other three were converted for use as casualty collecting vehicles.

Driving instruction, which had been suspended during the period of petrol rationing, was recommenced during October, when a class of 12 trainees was formed.

A number of exercises were held as follows:

“Alpha”—July 23rd

This was held at the Netham Training Ground, the object being primarily to practise Ambulance and Casualty Collecting personnel in their operational duties under simulated air-raided conditions, with faked casualties, with the co-operation of the Rescue and Wardens' Sections.

“Surprise”—August 27th

With the co-operation of British Railways, who kindly provided the necessary rolling stock, a train crash was staged at the Clifton Down Railway Station. It exercised the movement of vehicles and personnel to cope with the problems involved in the event of a civil disaster.

“Bit”—October 19th

In co-operation with the City Ambulance Service, the section was exercised in operational control procedure, using as a Depot Area the Home Office Training School at Falfield.

The Autumn 1957 Bristol Sub-Regional exercise entitled “Brace” was held on the 26th and 27th October. It was concerned primarily with exercising the control organisation of the Bristol Sub-Region. No physical incidents requiring the deployment of services were staged, but the Medical Officer of Health was represented at the Area Control, and members of the section acted as Ambulance Staff Officers for the Mobile Sub-Area and Sector Controls.

As an example of peace-time activities, the section assisted in the search for two children missing from their home. During the search a young man fell approximately sixty feet down the cliff face on to a narrow ledge. He was reached by members of the Ambulance Section, who rendered first aid and, with the co-operation of others, raised him up the cliff by special apparatus brought by the City Ambulance Service, who removed him to hospital.

Competitions

The regional round of the South Western Region Civil Defence Corps Competition took place at Cheltenham on the 4th May, when the section was represented by one ambulance crew and a casualty collecting party. The Bristol team was successful and competed in the final at Weston-super-Mare on the 26th May, where they were unfortunately beaten by Gloucestershire. The Bristol team received the rose bowl presented to the runners-up.

The fourth Annual Ambulance Section Competition was held on the 6th October, when four teams competed for the challenge cup. The winning team once again came from the Bedminster Sub-Division, with St. George Sub-Division as runners-up. Each team consisted of one ambulance crew and one casualty collecting party. The competition took place at the Central Health Clinic and on an adjoining blitzed site. The judges were: Dr. K. P. Duncan, Chief Medical Officer for the South Western Gas Board; and Mr. C. Howe, Area Superintendent of the Somerset Ambulance Service. The trophy was presented to the winning team by Alderman F. A. Parish, C.B.E., J.P., Chairman of the Civil Defence Committee.

First Aid Training

The following table shows the number attending for First Aid training from all Sections of the Corps during the year:

	<i>Full First Aid</i>				
No. of classes	6
No. of volunteers attending	75
No. of volunteers examined	58
No. of volunteers passed	58

Administration

Reference has already been made to the new appointment of Mr. R. F. Turner as a full-time Instructor. In addition, authority was given to employ a full-time Driver/Storekeeper, whose duties would be to re-fuel, clean and check all vehicles and equipment.

During November, Mr. E. G. H. Spencer was appointed Chief Clerk in the Environmental Health Services Section and was, therefore, no longer able to devote sufficient time to the duties of Civil Defence Staff Officer; these duties were transferred to Mr. W. J. C. Winterson, who was responsible in the Health Department for supplies and transport. Consequent upon Mr. Winterson taking up these duties, the civil defence office, formerly in Health Department premises at 36 Queen Square, together with the full-time secretary, were transferred to the Central Health Clinic.

I N D E X

	<i>Page</i>
After-care of handicapped children	44
Athlete's Foot investigation	5
Blind children	10
Cardio-rheumatic clinic	26
Child guidance clinic	3
Children's chest clinic	4
Chiropody clinic	5
Clinics	49
Delicate children	19
Dental clinics	6
Deaf children	11
Deaths of school children	6
Ear, Nose and Throat Service	8
Educationally sub-normal children	15
Employment of children	8
Enuresis clinic	9
Epileptic children	23
Eye clinics	9
Health Education	26
Hearing Assessment Clinic	11
Home and Hospital Teachers' Service	21
Immunisation	28
Ineducable children	17
Infectious diseases	27
Infestation	31
Maladjusted Children	18
Mass Radiography	41
Medical examinations of entrants to teaching profession	28
Medical inspection	28
Milk and meals	29
Minor ailments	31
Nursery schools and classes	32
Nutrition clinic	33
Open-air schools	19
Orthopaedic and postural defects	34
Partially sighted children	10
Partially deaf children	11
Physical education	34
Physically handicapped children	19
Propaganda on Special Schools	22
Psychological service	36
Ringworm	31
Spastic children	24
Speech clinics	37
Staff	46
Statistical tables	61
Sunlight clinic	40
Treatment of pre-school children	33
Tuberculosis	40
X-ray of teachers and other staff	42
Youth Employment Service	43
Old Girls of Croydon Hall Residential School (Appendix A)	50
School Health During the Last Fifty Years (Appendix B)	51
Menarche (Appendix C)	56
Refresher Course for School Medical Officers	57

INTRODUCTION

I have much pleasure in presenting the Annual Report on the School Health Service for 1957, the fiftieth report of the series. This year marks the fiftieth anniversary of the introduction of medical inspection and treatment for school children which was commenced as a result of the passing of the *Education (Miscellaneous Provisions) Act, 1907*.

The work of the School Health Service which began by giving medical inspections to school entrants and leavers, with treatment for only the most acute and severe cases, has expanded during the years and now offers a complete inspection service with a wide variety of treatment at clinics situated in all districts of the City. The Service has developed more and more as a preventive service and it offers a most valuable contribution to the health of the community and plays a most important part in the national scheme of social and preventive medicine.

A report by Dr. Smallwood on the advances made in the health of school children during these years is given on page 51 (Appendix B).

The dental staff position still gives cause for some anxiety. With the increase in the number of dentists appointed during 1956 it was hoped it would be possible for the staff position soon to be brought up to full strength. Mr. James, however, resigned his appointment after a comparatively short stay, and unfortunately it was not found possible to fill this vacancy by the end of the year. Private dental practitioners have been engaged on a part-time basis as far as possible to cover the deficiency, but the continued difficulty in obtaining full-time dentists is a cause of concern and disappointment.

A refresher course for school medical officers under the auspices of the School Health Service Group of the Society of Medical Officers of Health was held in Bristol during the year, and an account of this course is given in a report by Dr. Smallwood on page 57 (Appendix D).

An entertaining and informative account of the lives of some of the girls who have left Croydon Hall Residential Special School for E.S.N. Girls is given by Miss Davies, the headmistress of the school, on page 50 (Appendix A).

Dr. Rogan, one of the Authority's medical officers, has been carrying out an investigation into the commencement of menstruation among Bristol school girls and though this survey is not yet completed, an interim report is given on page 56 (Appendix C).

With the increased supply of vaccine which became available during the year, the programme for the vaccination of children against poliomyelitis was considerably extended during the year, and 13,885 children of school age were given a complete course of injections.

Dr. Grace Woods contributes an interesting account of an investigation into hearing defects among cerebral palsied children in Bristol, which is given on page 13. A special class for junior partially deaf children was opened at Eastville Junior School during the year.

The close co-operation which has existed between various departments concerned with the health and welfare of the children has continued during the year and our good relationships with the hospitals and with the private practitioners have contributed greatly to the smooth and efficient working of the Service.

I should like also to express once more our thanks to Mr. G. H. Sylvester and his staff, in particular the teachers and school welfare officers whose ready help at all times is of such value in the work of the School Health Service.

R. C. WOFINDEN.

CHILD GUIDANCE CLINIC

R. F. Barbour

Changes of Staff

This year saw the retirement of Dr. Doris Heron, on the 30th April. She came to the Clinic in 1936, and for just over twenty years was a regular member of the Clinic staff. She was an outstanding therapist, especially with the younger children, and her place will be an extremely hard one to fill.

Dr. Kenneth Harrison replaced Mr. C. J. Beedell as Senior Assistant Psychologist in February, 1957, but resigned after five months to take up a post in Canada. The position of Senior Assistant Psychologist is now filled by Mr. W. C. King, B.Sc., who joined the staff on the 1st October, 1957.

Annual Statistics

<i>Psychiatric</i>					1956	1957
Diagnostic interviews	..	..	..	..	361	362
Physical examinations	..	..	..	..	343	351
Treatment interviews	..	..	..	..	1314	1336
Parent interviews	..	..	..	..	162	158
Others interviewed	..	..	..	..	13	8
<i>Psychological</i>						
Examinations, including Juvenile Court cases	..				665	639
Treatment interviews	..	..	..	..	1239	1010
Parent interviews	..	..	..	..	160	122
Others interviewed	..	..	..	..	19	15
Other visits	..	..	..	..	95	104
<i>Social</i>						
Interviews with parents	..	..	..	..	2233	2157
Interviews with others	..	..	..	..	13	7
Home visits	..	..	..	..	184	203
Other visits	..	..	..	..	4	17

Child guidance nowadays is tending to be seen as part of a larger concept of "Mental Health for the Family." Mental health has become the central health issue of the day, particularly as nearly half the beds of the hospitals of the country are occupied by psychiatric cases and when general practitioners are reporting 1 in 4 of their cases as being primarily emotionally determined. As a result, more and more attention is being paid to the early stages of maladjustment, particularly those in the pre-school period. Child guidance has tended to be linked with education, but now it is realised that the serious problems are usually already in being by the time the child comes to school. Anti-authoritarian trends and lack of self-confidence, can be present the first day the child goes to school. Nevertheless, it is often the child's failure to progress in school, or his inability to get on with other children, which makes parents and others first aware that all is not as it should be.

Treatment may be directed either towards the child or towards his environment, or preferably towards both. The playroom allows the child a natural, easy, permissive environment, where he can express himself, when the "urges" that have too often to be restricted at home can be allowed relatively free play—a place where a mess will not be frowned on just because it is inchoate and apparently purposeless, and where the grown-up can be "shot at" with relative impunity, or at any rate without immediate retaliation.

Recordings were made of some of the play sessions by a B.B.C. (West Region) Team, and a half-hour's broadcast went out over the West Regional programme on Tuesday, April 2nd, 1957, entitled "Roger wants a Lion." Two interesting discoveries were made during the process of recording: the first the effect on a playroom of a moderate degree of sound-proofing. The room

has bare walls which reflect every sound, but are splash-proof and fire-resistant; the echoes, however, made it unsatisfactory for broadcasting purposes and drapes were accordingly hung on the walls. At once, the room took on an intimate and cosy atmosphere. The second rather unexpected result was the effect on staff and children of the actual recording session. Every child, even those regarded as less promising, produced something that was noteworthy. At once one wondered whether this was chance or did it indicate a heightened child/therapist relationship? The therapist was out to make the most of the session, and the child responded.

Just as children should be able to feel at ease in the playroom and be able to do what they want, it is equally important that parents should feel relaxed.

Chairs have to be comfortable and the atmosphere an easy one in which parents can express what they often call their "silly ideas" without fear of being laughed at. Clinic staff members realise the importance of these points and, as far as the Committee and the budget will allow, plan accordingly.

We are not always so conscious of the impressions we make ourselves, and during the past year various members of the staff have used a Grundig tape recorder, again with interesting results. Possibly in America the self-analysing, self-recording techniques are overdone, but in this country we would do well to practise them more often. It is a novel and not always happy experience to hear one's own interview played back. The words may say one thing, but the tone used conveys quite a different meaning. To listen next day to one's own interview gives one a chance to assess it objectively and to give more nearly equal weight to one's own views and those of the other person. "Did I really say that? Do I start sentences and leave them unfinished?" One's own technique can improve and at the same time one can gradually collect a library of records which are of the greatest value in lecturing to students, parents or teachers.

It is hard to draw a line between the environmental approach and the more important personal relationship between child, parent, and therapist. Probably for nearly all fundamental psychotherapy some form of so-called transference relationship is essential, and as the principles of mental health, particularly on the preventive side, are appreciated more and more by other workers in the field such as health visitors, child care officers and the like, so the work of the Child Guidance Clinic is likely to become increasingly one of deeper therapy, for which members of staff have to have special training and experience.

CHILDREN'S CHEST CLINIC

M. D. Gibson

As in previous years, a number of children were seen suffering from recurrent colds associated with cough in addition to asthma and hay fever cases. Many of these "chesty" children's troubles dated from an attack of measles, whooping cough or pneumonia, and it cannot be too strongly emphasised that if a child is getting repeated attacks of head or chest colds for as long as two to three months after one of these illnesses, there is much more chance of avoiding permanent damage to upper respiratory tract or lungs if effective treatment is instituted without further delay. This type of case is beginning to put heavy pressure on the three physiotherapists at the Central Health Clinic but in an early case the results are very rewarding and relatively short periods of treatment have resulted in a continued high discharge rate from this clinic.

The statistics relating to the work in this clinic during 1957 are as follows:—

			<i>School Children</i>	<i>Under School Age</i>
New Cases	..	..	78	8
Total Attendances	..	..	205	22

CHIROPODY CLINIC

L. I. W. Tasker

The numbers of children attending for foot treatment during 1957 show a reduction on those for 1956. This fall in numbers was due entirely to a reduction in the number of cases of verrucae. Cases of this complaint amongst school children attending the clinic were only 486 compared with 970 in 1956. This is probably due to the efforts which have been made in the schools, swimming baths, and elsewhere to diminish the spread of this disorder. The numbers of children attending for other defects remained fairly constant, and there is no significant change as compared with 1956. During the year 28 cases were referred to the Orthopaedic Department for further advice or physiotherapy.

Attendances for Treatment, 1957

<i>Defect</i>	<i>Primary, Secondary and Grammar Schools</i>		<i>Nursery Schools</i>		<i>Maternal and Child Welfare</i>	
	<i>1st Att.</i>	<i>Other Att.</i>	<i>1st Att.</i>	<i>Other Att.</i>	<i>1st Att.</i>	<i>Other Att.</i>
Hammer toes ..	11	55	—	—	—	—
Metatarsalgia ..	1	6	—	—	—	—
Verruca	485	2,323	1	5	1	—
Pes Cavus ..	2	2	—	—	—	—
Hallux Valgus ..	8	49	—	—	1	—
Strain	13	35	—	—	—	—
Miscellaneous ..	238	481	1	2	2	5
TOTAL	758	2,951	2	7	4	5

Athlete's Foot SurveyM. P. English
M. D. Gibson

The survey of children suffering from "Athlete's foot" which was started during the summer term of 1956 in three widely separated districts of Bristol was continued during 1957.

Some 4,794 children in all have been examined so far, the aims of this preliminary investigation being to find the prevalence of the condition in senior boys' and girls' schools and in junior boys' schools; to find whether it was more common in one district than in others; to find whether the condition was predominantly due to a pathogenic fungus and finally, if possible, to get some indication of the mode of spread of infection.

We found that an average of 40.6 per cent of the boys examined in six senior boys' schools had lesions varying from minor degrees of scaling and redness, through fissuring, to vesicle formation (this last was rare). In only 6.6 per cent of the boys with lesions was a pathogenic fungus isolated. In the six senior girls' schools 30 per cent of the children examined had lesions (similar to those found among the boys) but in only 1.6 per cent of the girls with lesions could we isolate one of the foot mycoses. A similar low percentage of lesions was found to be due to a fungus infection among the children examined in the junior boys' schools.

In one district the number of children with fungus infection in senior boys' schools was found to be twice as great as in the other two districts combined.

The various ways in which the spread of fungus infection may take place, such as shed particles of skin on the floors of swimming baths, school shower baths, changing rooms and gymnasias, shared towels and school gym shoes, infection in the child's own home, are now being investigated. We have been given invaluable help in this part of the survey by the Chief Organiser of Physical Education and the Superintendent of Swimming Baths and their respective staffs.

DEATHS OF SCHOOL CHILDREN

A.L.S.

There was again a slight increase in the number of deaths of children of school age, there being 27 in 1957 as compared with 25 in 1956 and 16 in 1955. The sex ratio is rather more equal this year, there being 15 boys and 12 girls who died during the year. Accidents, especially road accidents, still provide the greatest single cause of deaths among children of school age. Road accidents accounted for 5 deaths (3 boys and 2 girls) and other accidents 4 deaths (3 boys and 1 girl). There were 2 cases of death from cerebellar tumour, and 1 from cerebral haemorrhage. Otherwise the causes of death were rather more varied than in former years. The causes of deaths among school children during the year are given below.

	<i>Boys</i>	<i>Girls</i>
Nephritis	1	—
Status asthmaticus	—	1
T.B. meningitis	1	—
Congestive cardiac failure	—	1
Polyarteritis nodosa	—	1
Hydronephrosis, bronchitis	—	1
Leukaemia	1	1
Bilateral ureteric obstruction	1	—
Hydrocephalus	—	1
Cerebellar tumour	2	—
Cerebral haemorrhage	—	1
Poliomyelitis	—	1
Idiopathic thrombosis of sinus	1	—
Thrombocytopenic purpura	—	1
Progressive muscular atrophy	1	—
Congenital heart disease	1	—
Road accidents	3	2
Other accidents	3	1

DENTAL CLINICS

W. H. B. Stride

The staff position which had improved last year left us in December with 9 full-time dental officers. Two new dental officers commenced duty in January, Mr. W. Chapman on 1st January, and Mr. J. James on 7th January. The appointment of Mr. James enabled a commencement to be made with dental treatment at the Mary Hennessy Clinic at Hartcliffe, a rapidly developing housing area on the periphery of the City. This work continued until the end of June when Mr. James resigned his appointment. It had, unfortunately, not been found possible to replace Mr. James by the end of the year. The number of sessions given by private practitioners during the year was approximately 800, or nearly the equivalent of 2 full-time officers. In addition we were fortunate in continuing to have the services of Mr. Hazell, a dental officer of the Regional Hospital Board, at Southmead Clinic for three sessions per week. With the assistance provided in this way by part-time dental officers, the staff at the end of the year was approximately equivalent to 11½ full-time officers.

The number of children inspected in schools during the year was 45,187 and the number actually treated was 17,410. The number of permanent fillings carried out for school children was 16,942. In addition to children attending the primary and secondary schools, 562 nursery school children were seen during the year. Evening sessions for dental treatment were regularly held at six of the Authority's clinics. They are well attended and have been much appreciated by parents and pupils, especially in the case of Grammar and Secondary School children. Arrangements are made for pupils attending residential schools maintained by the Local Authority to be inspected by the dentists on their return to Bristol at the beginning of each holiday period and every endeavour is made to carry out any treatment required during the holidays.

There is a very happy feeling of co-operation in the City between the private practitioners and the Local Authority. On each occasion when the Local Dental Committee has been asked for assistance by the provision of part-time dental practitioners to help in the clinics, every endeavour has been made to afford us the necessary help. This good relationship makes it certain that we shall receive every possible assistance from the Local Dental Committee in the provision of part-time assistance from the dental practitioners.

The arrangements made in October, 1947, whereby a number of Bristol school children are inspected and treated by the Department of Children's Dentistry at the Bristol Dental Hospital were continued. The figures relating to the children dealt with at the hospital in 1957 are as follows:

No. of cases inspected	..	..	862
No. needing treatment	..	..	696
No. of new cases treated	..	..	169
No. of others treated	..	..	898
Total attendances	..	..	1,067

Oral Hygienist

The work of the Oral Hygienist has continued during the year and 2,446 scalings and polishings have been carried out for children. When children with neglected mouths are treated by the Oral Hygienist opportunity is taken to give advice to the parents, and where appropriate the child also, in the care of the teeth. It is quite difficult sometimes to persuade parents that brushing the teeth in the mornings only is not sufficient. Children are very forgetful and some of them have to be seen again and again by the Oral Hygienist. Occasional talks on dental hygiene are given in the schools and these seem to be much appreciated and are increasingly requested.

Dental Technician

The Dental Technician is finding the new workroom at the Charlotte Keel Clinic in Claremont Street much more convenient from all points of view than the temporary one previously used.

During the year 104 dentures were made for children and in addition there were 20 repairs or additions.

The number of inlays made was 8.

Orthodontic Clinic

The arrangements for children requiring orthodontic advice and treatment have continued during the year. Children are seen by Mr. Nicol, the Orthodontic Specialist from the Dental Hospital, who attends at the Central Clinic on one session a week for this purpose. Cases that will respond to simple treatment or require a period of observation are dealt with at the Clinic, while those requiring appliance therapy are dealt with at the Dental Hospital.

Mr. Nicol reports that the waiting time for non-urgent cases which built up to about six months during 1956, has been held about the same during 1957. Urgent cases continue to be seen for treatment at the Dental Hospital almost immediately. This situation is satisfactory both from the point of view of the staff and patients.

Details of the work of the diagnostic clinic during the year are as follows:

No. of new patients	..	..	636
No. of attendances	..	..	824
No. referred to Dental Hospital	..	..	444
No. terminated treatment	..	..	44

EAR, NOSE AND THROAT SERVICE

H. D. Fairman

Work in the ear, nose and throat clinics proceeded without incident throughout the year. Owing to the high incidence of acute anterior poliomyelitis, operative treatment on those children requiring removal of the tonsils and adenoids and attention to the nasal sinuses had to be suspended from May to August inclusive. This has resulted in a large waiting list of these children.

During the past year the number of children suffering from aural defects attending the Clinic was 363 (including 6 pre-school cases and 24 nursery cases).

Out of a total of 97 new cases of middle ear suppuration found at school medical inspection, 63 failed to clear up with a few weeks' routine treatment at the minor ailment clinic, and were therefore referred to the aural clinic. Only 16 of these cases were outstanding at the end of the year (11 attending for treatment, 1 absentee and 4 having left school).

A major effort has been made throughout the year to improve the services for the detection and assessment of hearing defects in infants and the pre-school child. Health visitors and general practitionerers have been alerted. The hearing assessment clinic has been re-organised and we have obtained the services of Mrs. Stephens, who is a trained teacher of the deaf and has had considerable experience at the Audiology Unit of the Royal National Throat, Nose and Ear Hospital.

EMPLOYMENT OF CHILDREN

L. A. Tavener

During the year ended 31st December, 1957, appointments for medical examinations were made for 804 children. Of this number 5 did not attend and 4 were found unfit, and in these cases registration was refused. The remaining 795 were found fit and registration was completed.

The total number registered was 8 less than during the previous year, and the average number employed at any one time dropped from 474 in 1956 to 455 in 1957.

Thirty-four children were examined and found fit to take part in public entertainments. Again, no Bristol children took part in the 1957/58 pantomimes, but 21 Bristol children were licensed to appear in a talent competition at the Bristol Hippodrome.

The following table shows the types of employment in which children registered during the year were engaged.

	<i>Trades</i>				<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Newsagents	634	61	695
Butchers	8	—	8
Grocers	11	3	14
Chemists	2	—	2
Drapers	—	4	4
Multiple stores	—	55	55
Others	7	10	17
TOTAL	662	133	795

ENURESIS CLINIC

J. E. Kaye

During 1957, 341 children attended the enuresis clinic, 206 boys and 135 girls. Of these, 149 were new patients, 106 started treatment in 1956, 53 in 1955, 23 in 1954, 8 in 1953 and 2 in 1952.

Out of the total number of 341 patients, 64 were discharged as cured after at least 6 months observation, and 72 children who were improving failed to attend and were discharged. It is reasonable to suppose that a considerable number of these are dry. Another 93 patients failed to attend for re-examination and were discharged. These children had shown no improvement at all, nearly half of them (45) having started treatment in 1957 and discontinued attendance after 2 or 3 visits only. The main reason for failure to attend was the disappointment of the parents, who were not prepared to co-operate, but expected a drug or medicine to cure the child. Six children left the district and two reached school leaving age and were discharged. Twenty-one patients seriously disturbed emotionally were referred to the Child Guidance Clinic for full psychological investigation and treatment.

As in previous years, in treating enuresis our aim was not only to treat the unfortunate child but also to improve the relationship between the patient and the rest of his family. Enuresis is a family problem. It involves not only the bed-wetter but also his parents, especially mother who does the washing, and his brothers and sisters who often sleep not only in the same room, but in the same bed.

In the majority of cases the life of an enuretic child is one of continuous humiliation, frequent punishments and promises of generous rewards if he stops "this dirty habit." This sort of existence and experience of continuous failure despite efforts to become dry, makes the child miserable, he loses self-confidence, becomes difficult at home, aggressive, and adopts a "couldn't care less" attitude. It is, therefore, very important to convince the parents that the child is not lazy and dirty but that he needs encouragement and support.

We were fortunate, as in previous years, to have advice and help from the Child Guidance Clinic and the co-operation of Miss Margaret Astley, the Psychiatric Social Worker, who helped us to straighten out many problems of our patients and their families.

EYE CLINICS

R. R. Garden

During the year refractions were carried out at the clinics for 5,602 children, comprising 5,570 from primary, secondary and special schools, and 32 from nursery schools, and 2,508 pairs of spectacles were prescribed. Glasses were not regarded as necessary in 1,115 cases, but some of these cases were listed to be kept under observation.

All children who need special investigation, decisions as to the form of education best suited to their visual capacity, or who may be regarded as suitable for squint operations are seen at the weekly consultant sessions held at the Central Clinic. During the year 158 operations for squint were performed on Bristol school children at the Eye Hospital. In all cases, a preliminary investigation in the Orthoptic Department of the Eye Hospital, or of the Central Clinic, preceded the surgical treatment, and in suitable cases a course of orthoptics is given before, and occasionally after the operation.

In this connection, the Orthoptic Clinic at the Central Clinic continues to provide a most useful diagnostic and treatment service. Miss M. J. Smith, who is in charge, reports as follows on the work of 1957:

The Orthoptic Clinic at the Central Health Clinic has continued to function during the year on the lines mentioned in the report for 1956. The statistics for the year are as follows:—

School children					
New cases	..	..	..	..	244
Total attendances	..	..	..	..	1,765
Under school age children					
New cases	..	..	..	..	114
Total attendances	..	..	..	..	373
Number of sessions at Central Clinic	..	..			380
Number of sessions at schools	..	..	..		2

As was mentioned in the report for 1956 it was hoped to commence an experiment in detecting visual errors in very young children. A start was made with this experiment and two afternoons were spent at Henleaze Primary School, testing the vision of all the five-year-olds. Some defective visions were noted and a report was submitted to the Principal School Medical Officer. It is hoped to continue this vision check on five-year-olds in some other City schools.

HANDICAPPED CHILDREN AND SPECIAL SCHOOLS A.L.S. Blind Children

The number of blind children placed by the Authority at various schools has remained virtually unchanged, there being 22 children in these schools at the end of the year compared with 21 in 1956. Most of these children attend the Royal School of Industry for the Blind in Bristol, 16 as residential pupils and three as day pupils. One girl at the Royal Normal College for the Blind became 16 during the year, but has continued to attend the College under the further education arrangements. A number of children were placed at the various schools for the blind at the end of the year as follows:

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Royal School of Industry for the Blind, Westbury, Bristol:			
Residential Pupils	10	6	16
Day Pupils	3	—	3
Royal Normal College for the Blind, Shrewsbury	—	1	1
Condoover Hall, Shrewsbury	1	—	1
Worcester College for the Blind	1	—	1

Partially Sighted Children

It has, unfortunately, not been possible to bring into being the arrangements for the provision of accommodation for a second class for partially sighted children at South Bristol Open Air School which were mentioned in the report for 1956. One class has proved to be too small for our needs and is, of course, insufficient to cater for such a wide age range. The proposal is to provide for two classes rather smaller than the recognised number of 15, but this smaller number is thought to be desirable because of the complicated nature of the cases, most of which tend to have a dual handicap, partial sightedness accompanied by other handicaps such as mental retardation or physical disability.

At the end of the year the number of partially sighted children at South Bristol Open Air School and other schools was as follows:

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
South Bristol Open Air School	10	5	15
West of England School for Partially Sighted Children,			
Exeter	1	2	3
Chorleywood College for Girls, Hertfordshire	—	2	2
Exhall Grange School, Coventry	1	—	1

There were two children on the waiting list for admission to the partially sighted unit at South Bristol Open Air School at the end of the year.

Deaf Children

Elmfield School for Deaf Children

The Amplivox Individual Auditory Training Unit has proved to be a very useful adjunct to the equipment at the school. So successful has it been that it is proposed to have a similar unit in each of the classrooms when finances permit. At the end of the year there were 57 children (30 boys, 27 girls) in attendance at the Authority's Elmfield School for Deaf Children including 6 children (3 boys, 3 girls) from other Authorities. In addition the following children were being maintained at various residential schools at the end of the year.

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Mary Hare Grammar School, Newbury	2	—	2
Mill Hall Independent School, Cuckfield, Sussex	—	1	1
Royal School for the Deaf, Birmingham	1	1	2
St. John's Residential School for the Deaf, Boston Spa, Yorks.	1	—	1
Burwood Park School for the Deaf, Surrey	1	—	1
Royal West of England School for the Deaf, Exeter. .	—	1	1

In addition, two deaf/E.S.N. children were being maintained in Residential Schools at the end of the year, as follows:

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Rayners School for the Deaf, Penn, Bucks.	—	1	1
Bridge House School, Harewood, Yorks.	1	—	1

Partially Deaf Children

Arrangements that were mentioned in the Report for 1956 of setting up a special class for junior partially deaf children attached to one of our primary schools, commenced in September, 1957, when a class was established at Eastville Junior Mixed School. This class is run as part of the primary school under the Head, Mr. R. G. Lewis, whose friendly and helpful co-operation has done much to establish the success of this unit. A qualified teacher of the deaf was appointed to take charge of the class. As with most new ventures the number of children built up slowly, but at the end of the year there were 9 children in attendance. As is often the case with parents of partially deaf children some resistance was encountered to the suggestion that their child should attend the special unit, and occasionally this resistance was supported by the Head of the ordinary school attended by the child who sometimes failed to appreciate the extent of the child's handicap.

Children are transported to this special class by public service transport, with an adult person acting as escort. The outstanding problem now seems to be provision for the young partially deaf child of infant age, and this, with increasingly efficient methods of detecting deafness in the very young child, is likely to offer the most pressing problem in provision for this class of handicapped child. At the end of the year, in addition to the partially deaf children at Elmfield and the special class at Eastville J.M. School, the following partially deaf children were being maintained at residential schools.

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Tewin Water Residential School for Partially Deaf Children, Hertfordshire	2	—	2
Ovingdean Hall Residential School, Brighton	5	1	6
Monkton Wyld Residential School, Charmouth, Dorset	1	—	1

Hearing Assessment Clinic

During the course of the year meetings were held between the School Medical Officer and the four Ear, Nose and Throat Consultants of the City,

to consider how best to pursue the matter of detection and treatment of the young deaf child. The Authority was fortunate in being able to obtain the services of a teacher of the deaf who had had considerable experience with the Audiology Unit of the Royal National Throat, Nose and Ear Hospital. It was agreed with the consultants that it was desirable to have close contact between themselves and the Hearing Assessment Clinic, and that a campaign would be necessary to interest those concerned with the very young child to keep them alert to the possibility of deafness in the early years of a child's life. It was realised by the consultants that a policy likely to be followed by the Authority would tend to concentrate the care of the young deaf child into the clinics of one or two consultants, but this was realised to be unavoidable. It was recognised that the physical proximity of the Hearing Assessment Clinic to the clinic where the consultant worked was desirable but this unfortunately was not immediately possible. At the outset therefore the Hearing Assessment Clinic was held in its new form in part of the premises of a clinic in a reasonably central part of the City, the teacher of the deaf being employed for three sessions per week on the assessment of hearing and the training of the young deaf child, with some assistance from a school medical officer and psychologist. It is hoped in the future that this Clinic may be transferred to premises more accessible and where closer liaison can be maintained with the Ear, Nose and Throat Consultants, and others concerned in this work so that regular consultation may be possible. It is expected that the amount of work will increase in the future as with the earlier assessments possible under this system the matter of the placement of the young partially deaf child is likely to become an urgent problem. At the present time it is envisaged that some provision could be made for these children as part of the general arrangements for the care of children under five. At present it is not possible to make special class arrangements for the infant partially deaf child.

Partially Deaf Children Visited by the Peripatetic Teacher.

R. H. Sturman

In January 1957, there were twenty-three children, thirteen boys and ten girls, receiving regular instruction from the peripatetic teacher of the deaf.

During the year, four new children, two boys and two girls, were added to the list. A routine check visit was made for each of the fourteen children now able to manage without extra help. Altogether during the year 750 visits were made. In addition, seven boys and three girls were on the list of the children carried over from 1956. These were children less in need of help, and owing to pressure of work it was only possible to visit them occasionally though reports on their progress were received from the Heads of their schools.

At the end of the spring term one boy from a primary school was transferred to a residential school due to adverse home conditions and one boy needed no further help.

At the close of the summer term one boy and one girl had reached school leaving age and started work, one boy left the City and two others needed no further help.

When the new school year began in September, one boy and one girl moved up from primary to secondary schools while seven children from primary schools and one from the School for the Deaf were formed into a partially deaf class in Eastville School. A newly qualified teacher of the deaf, Mrs. Coult, was appointed teacher in charge of this class.

It was discovered that seven children at Claremont School for Spastics had some degree of deafness, and the peripatetic teacher was asked to advise and help there. A new Amplivox speech training aid was purchased and these children have been able to have training on four mornings a week. One child already had a hearing aid, a Medresco National Health Service aid was provided for another to whom extra help was given before he left in October for Canada, and Monopack aids have been recommended for the others for whom the Medresco aid is unsuitable.

The dispersal of children when the year ended was as follows:—

<i>School</i>	<i>Girls</i>	<i>Boys</i>	<i>Total</i>
Eastville Primary Partially Deaf Class	4	4	8
In Primary Schools	1	3	4
In Secondary Schools	5	5	10
In E.S.N. Special School	1	—	1
In Claremont School for Spastics ..	3	3	6
	—	—	—
TOTALS	14	15	29
	—	—	—

Hearing Defects among Cerebral-Palsied Children Grace E. Woods

The Cerebral Palsy Assessment Team at the Bristol Children's Hospital has seen 384 cases of cerebral palsy from the Bristol clinical area. These include 279 cases from Bristol and other cases from Somerset, Gloucestershire and Wiltshire. It seems likely that all cases among Bristol school children have been seen. The number includes 60 children under 5 years of age.

Many of these children have a severe physical handicap and for this reason do not give an accurate response to ordinary methods of hearing testing. Speech may be defective and delayed, and the use of the hands may be so poor that the child cannot respond by gesture. About 15 months ago I was able to observe the special methods of testing hearing in these children by Dr. Fisch and his team at the Audiology Unit, Royal National Throat, Nose and Ear Hospital. With audiometricians trained specially in this technique he is able to obtain a satisfactory audiogram on each ear for most cerebral-palsied children over 3 years of age. Dr. Fisch and his team have visited Bristol on two occasions and have tested about 60 children. He has found a hearing loss in a few cases that were not suspected, but in a large number of cases he has confirmed a hearing loss which had been strongly suspected by the teaching staff, but had not been confirmed by the normal channels of hearing testing. In both sets of cases the staff in contact with the children were convinced of the accuracy of the tests.

Dr. Fisch also showed that in a few cases where the staff had suspected deafness it was not present to such an extent that the child could not understand speech of some sort. In these cases mental deficiency must be a factor. With these latter cases tests worked out by Dr. Mary Sheridan and shown to me at Hortham Hospital are of particular interest. They are of use with backward children who have not sufficient intelligence to respond to Dr. Fisch's tests, and can be used on either ear. There remains a group of children whose response is so poor that at present they must be considered too mentally defective to be testable.

Many of the cerebral-palsied children are intelligent, attend ordinary school, and with quite superficial testing, deafness in either ear can be ruled out. A few of the cerebral-palsied children on crude tests in an out-patients' department are obviously deaf, and this group needs accurate testing to obtain audiograms in either ear. Most of these have been done. There remains a number of

children who are "under suspicion." A few of them are too young to obtain an accurate test, but it is hoped to get all of these to see Dr. Fisch on his next visit.

For purposes of classification the cases have been divided into the following groups, which describe the type of movement handicap present, and have some bearing on school placement. The details of hearing loss are given in each group.

Paraplegia

Spasticity of legs with good ability of hands; 42 cases. No evidence of deafness.

Monoplegia

Spastic paralysis of one leg only; 15 cases. No evidence of deafness.

Hemiplegia

Spasticity of one side of the body only; 114 cases. No case of deafness noted. There might be unilateral deafness on the side of the lesion in an occasional case, but it is not significantly so.

Quadriplegia

Spasticity of all four limbs; 92 cases. Nearly half of this group are mentally defective; 31 too backward to test; 48 definitely not deaf; 7 under suspicion (to be tested by Dr. Fisch); 3 show deafness.

A.T. of Gloucestershire, 21.4.53

Mild high frequency loss. I.Q. 92. Cannot walk. At Claremont School for Spastic Children. Class precaution only.

D.T. of Bristol, 25.12.49

Deafness in one ear only. I.Q. 106. Severe spastic. At Claremont. Class precaution only.

R.C. of Gloucestershire, 26.10.52

Mild loss. May be familial. I.Q. 89. Spastic. At Claremont. Class precaution only.

Ataxia

Unco-ordinated children; 33 cases. No evidence of *tested* deafness.

Rigidity

38 cases. Mentally defective rigid children. A large number in mental deficiency hospitals. Mental deficiency rather than deafness is the over-riding factor.

Athetoid

50 cases. Children with uncontrolled movement. It is in *this group* that cases of deafness occur and they appear to follow jaundice a few days after birth. 44 cases have been tested by Dr. Fisch; 11 cases are not deaf; 14 are deaf all in the middle and high frequency range; 19 are under suspicion and will be tested further (6 are almost definite).

The deaf cases are:

<i>Name</i>	<i>d of b</i>	<i>L.A.</i>	<i>Degree of Loss</i>	<i>Physical Handicap</i>	<i>I.Q.</i>	<i>Special help needed</i>
*J.C.	11.8.46	Bristol	High frequency only	Athetoid	\bar{c} 90	Nil Special
A.H.	27.10.49	Bristol (at Hortham Hospital)	High frequency	Athetoid	may be educable	?
*D.K.	4.9.47	Bristol	Mid frequency	Athetoid	\bar{c} 90	Nil Special
*J.S.	5.5.45	Bristol	High frequency	Athetoid	N	Special precaution. Normal school. Front of class, etc.
R.R.	14.8.46	Bristol	High frequency	Very mild Athetoid	\bar{c} 70	Special precaution. Normal school. Front of class, etc.
*T.C.	24.8.46	Bristol	High frequency	Mild Athetoid	\bar{c} 100	Hearing aid
*J.C.	14.6.51	Bristol	High frequency	Very mild Athetoid	\bar{c} 100	Hearing aid
*J.H.	16.1.50	Bristol	High frequency severe	Severe Athetoid	Normal	Hearing aid
*M.P.	7.7.52	Bristol	Severe loss, mid and high	Athetoid	Normal	Hearing aid
*D.T.	15.7.52	Bristol	Mild loss	Severe Athetoid	doubtful	Hearing aid
*V.T.	20.11.51	Bristol	? Aphasic High frequency	Severe Athetoid	High Normal	Hearing aid
*L.G.	20.2.51	Som.	Severe mid and high	Athetoid	Low Normal	Hearing aid (transistor provided by Som.)
D.H.	18.7.45	Bristol	Severe	Mild Athetoid		Hearing aid provided by Bristol at Deaf School
D.L.	13.1.54	Bristol	Severe	Severe Athetoid	Ineducable	Subsequently reported to Mental Health Service

*At Claremont School for spastic children.

The last eight need special educational provision because of deafness in addition to their physical handicap.

The first five need special precaution only in a class—front of class, etc., opportunity to lip read.

Cases not yet tested, but will almost certainly need a hearing aid:—

A.B. (4.3.55)	Weston Super Mare	Athetoid	Will need special C.P. School
M.C. (14.12.53)	Bristol	Severe Athetoid	Claremont later
T.H. (12.1.54)	Bristol	Severe Athetoid	? Claremont
S.T. (13.5.54)	Bristol (Almost certainly deaf)	Athetoid	At Claremont
D.L. (13.1.54)	Bristol	Severe Athetoid	? Claremont
A.K. (20.2.56)	Timsbury Nursery (Almost certainly deaf)	Athetoid	Should have aid as soon as possible

Educationally Sub-normal Children

The Authority's day schools for educationally sub-normal girls and junior children are in favourable surroundings and in premises which offer very good facilities. The provision for the senior boys, however, lags somewhat behind the standards, and it is earnestly hoped that it will be possible in the not too distant future to re-house the school in more suitable premises. The number of

children on the registers of the three-day schools for educationally sub-normal children at the end of the year was as follows:

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Russell Town (Senior Boys) (including 2 from other Authorities)	143	—	143
House in the Garden (Senior Girls) (including 5 from other Authorities)	—	88	88
Henbury Manor (Junior Mixed)	51	49	100

Henbury Manor Special School

The diagnostic unit which has been set up at this school fills a great need by enabling children of borderline educability to be tried out in a school situation, and it is hoped to maintain and strengthen this policy of taking children who appear to be of relatively low intellectual level into the school for an educational trial and a full appraisal of their potentialities. The children are only accepted into this unit after a conference of those concerned, the Head of the school, the Senior Psychologist, and the Medical Officer of the school. With this policy it is expected that undoubtedly more children will be admitted, who, after a short stay at the school, will have to be assessed as ineducable. It is important that this policy should be pursued, not only for the benefit of the children themselves, but also for the sake of the parents, as the best way of convincing the parent that the child is ineducable is by means of a trial in this school. There has been a move to suggest that occupation centres for borderline cases should be set up under Local Education Authorities but with an arrangement such as this it is difficult to see how such a provision is really necessary. On the other hand, however, it must be mentioned that parents would only feel reasonably satisfied with the reference of their children to the Mental Health Authority as ineducable if the provision for the children in the occupation centres is good, and we believe that in Bristol the occupation centre arrangements are as good as can be arranged with the present buildings.

Senior Day Special Schools

A.L.S.

There seems to be slightly less pressure on the senior special schools because of the arrangements that now exist for catering for educationally sub-normal pupils in special classes in the ordinary schools. It has been possible to arrange more smaller classes for backward children in the ordinary schools although these classes may not be nominated as "special" classes. It is hoped to extend this provision and proposals are under consideration for certain training arrangements for teachers of backward children in all types of schools.

Defective home care is one of the common reasons for the recommendation that a child should attend a special school, and the relationships with the homes of the children still cause concern in the schools. It is not possible to do all we would like in influencing a family to accept the child's limitations of ability because of the shortage of welfare staff. The special schools after-care welfare officer has done yeoman service in this connection for many years and it is most desirable to extend this service to enable care to be given while the children are still at school, so that when they leave, any advice and after-care needed will be better received because the parents have come to trust the after-care officer's services.

Residential Special Schools

Kingsdon Manor Residential Special School is situated in very pleasant surroundings about forty miles from Bristol and caters for the needs of those educationally sub-normal boys who for one reason or another need special care.

There seems to be some increase in the demand for places for Bristol boys, and at the end of the year there were 51 Bristol boys on the registers compared with 46 in 1956, and 11 boys from other Authorities as compared with 14. The medical arrangements are in the hands of the local general practitioner who takes the boys on his list of patients under the National Health Service arrangements and visits the school at any time at the request of the Headmaster. One of the assistant medical officers also visits the school each term to carry out a general medical inspection.

Croydon Hall Residential Special School for educationally sub-normal senior girls is smaller than the school for boys and accommodates 40 girls. Educationally sub-normal girls tend rather more than boys to need residential care for social reasons. At the end of the year there were 19 Bristol girls on the registers of the school, and 19 girls from other Authorities, making a total of 38.

The placement in employment of pupils from E.S.N. schools has tended to become rather more difficult this year because of the general employment situation, and in this connection the report of Miss Davies, the Head of the School, on the girls who have left the school, will be of interest. (Appendix A.)

In addition to the children at the Authority's residential special schools, the following children were being maintained in independent schools for E.S.N. children:

	Boys	Girls	Total
Spring Hill School, Ripon	1	—	1
Besford Court R.C. School, Worcestershire ..	3	—	3
Peredur Home School, East Grinstead	1	—	1
St. Joseph's R.C. School, Cranleigh, Surrey ..	1	—	1
Clyffe House School, Dorset	2	—	2
St. Christopher's School, Bristol (Day pupils) ..	7	1	8

Ineducable Children

During the year 73 children were referred to the Local Health Authority for the purposes of the *Mental Deficiency Acts*, 42 under Section 57 (3), 2 under Section 57 (3) and (4), and 29 under Section 57 (5) of the *Education Act, 1944*. In addition 54 educationally sub-normal children who left school during the year were referred to the Special Schools After Care Officer for supervision after leaving school. Of these 27 had been attending special schools and 27 had been receiving special educational treatment in ordinary schools. In addition 4 children in the care of the Children's Officer were referred for supervision by the Children's Department. No supervision was thought to be necessary in the cases of 8 children (2 from special schools and 6 from ordinary schools).

Ineducable Children referred back to the Educational System

It is thought that it might be of interest to review the number of children who have been referred back to the educational system after having been reported to the Local Health Authority as ineducable. The following table gives details of the cases since 1st January, 1949, where the report has been cancelled and the child returned to the educational system under Section 8 of the *Education (Miscellaneous Provisions) Act, 1948*.

Children reported as ineducable who were subsequently taken back within the educational system under the provisions of Section 8 Education (Miscellaneous provisions) Act, 1948

<i>Name</i>	<i>Date of Birth</i>	<i>Date reported and I.Q.</i>	<i>Date of cancellation and I.Q.</i>	<i>Remarks</i>
J.O.	25.11.38	March, 1950. I.Q. 65. (behaviour problem)	June, 1950. I.Q. 65	Reported again on 28.8.54 under Sect. 57 (3 & 4)
J.D.	2.8.41	January, 1950. I.Q. 53	March, 1952. I.Q. 58	Removed to Gloucester, April, 1953
D.W.	28.8.43	June, 1950. Reported by Manchester Authority	February, 1952. I.Q. 86	Boy died 15.2.57. Acute meningitis
A.W.	18.11.41	November, 1949 I.Q. between 40-50	August, 1955 I.Q. 57	Reported again to Mental Health Authority on 15.3.57. I.Q. 55
D.K.	4.9.47	August, 1952. Reported by Somerset Authority; no formal I.Q. result	December, 1954 I.Q. 40-50	Child admitted to school for spastic children
C.S.	6.10.44	April, 1951. Formal test not possible	March, 1952 I.Q. approx. 80 (Psychotic behaviour)	Boy admitted to independent special school, then tried at Authority's Day Special School. Later transferred back to independent school
D.F.	19.7.43	October, 1951 I.Q. 50	October, 1955 I.Q. 58	Admitted to Residential Special School.
C.S.	15.8.49	March, 1952. Formal test not possible	February, 1955 I.Q. 74	Admitted to Bristol Blind School
B.P.	29.10.49	February, 1956. I.Q. 61; reported by Devon Authority	September, 1957 I.Q. 63	Admitted to Day Special School

Maladjusted Children

The problems of maladjusted children are becoming increasingly recognised and the necessity for special provision being made for them understood. Children with this sort of difficulty have suffered in the past because there has been no official recognition of their handicap status. Now that this has been recognised, however, it is still sometimes difficult for lay persons to understand fully the needs of these children. This difficulty is not made easier by the fact that few special schools are available for children with this type of handicap. Very often an ordinary residential school has to be used, and sometimes the capacity of the school to deal with these children has to be proved. This usually means a visit by members of the Child Guidance Clinic and office staff to various schools and one always looks to those schools as far as possible within a reasonable distance of the city. Very often the position is further complicated by the fact that these independent ordinary schools which could and do take maladjusted children very reasonably refuse to take more than a certain proportion of children who have emotional or behaviour difficulties. This position seems unlikely to be resolved in the near future unless some of the large authorities or combinations of authorities are able to set up schools or hostels for maladjusted pupils which of course would have to be very small units. Official opinion still seems to waver between the use of hostels or special schools for children in these categories. Hostels tend to be less readily acceptable by parents but are more appreciated by Local Authorities. Both hostels and schools have

their difficulties in the way of staffing, there being still too few courses of training for suitable teachers and other staff. There is greater difficulty in the placement of the maladjusted child over the age of about twelve years, but as the assessment and reference of these children becomes more possible at younger ages this difficulty may well spread to the younger age groups. We are fortunate in Bristol in having an independent school located in the City which does very good work with children with multiple handicaps and this is bound to include children with maladjustments, even if the maladjustment is not the dominant reason for the placement there of the child. At the end of the year the following children were being maintained by the Authority in residential schools or hostels for maladjusted children.

	<i>Boys</i>	<i>Girls</i>
Sutcliffe School, Winsley, Wilts.	1	—
Rudolf Memorial School, Dulwich	1	—
Redhill School, East Sutton, Kent	1	—
Chaigley School, Thelwall, near Warrington	3	—
Swalcliffe Park School, Banbury, Oxon.	1	—
Ciceley Houghton School, Wetley Rocks, Staffs.	1	—
Bourne House Hostel, Lincoln	—	1
The Gables Hostel, Willand, Devon	—	1
Halcon House Hostel, Taunton, Somerset	—	1
Southfields Hostel, Ilminster, Somerset	1	—
Walton Elm School, Sturminster Newton, Dorset	3	—
Salesian Independent School, Longhope, Glos.	1	—
Whatcombe House School, Templecombe, Som.	1	—
St. Andrew's School, Bridgwater	1	—
Cotswold Chine School, Box, near Stroud	1	—
Farney Close School, Bolney, Sussex	1	1
Michael Hall School, Forest Row, Sussex	1	—

Delicate and Physically Handicapped Children

B. J. Boulton

Periton Mead Residential Open Air School

During the year the school has continued to provide residential accommodation under open air school conditions in seaside surroundings for delicate children from Bristol and occasionally from other Authorities. Many of the children admitted are suffering from asthma, and these cases seem to do particularly well at the school. There is close co-operation with the day school for delicate children and a number of children are transferred from the day school to have a period at Periton Mead. At the end of the year there were 57 children (31 boys and 26 girls) on the registers of the school. This includes 10 children (7 boys and 3 girls) from other Authorities.

South Bristol Open Air School for Delicate and Physically Handicapped Children

At the beginning of the year the school welcomed its new Headmaster, Mr. C. Williams, who came to us from the Children's Convalescent Hospital School at Marlborough. The school has continued its work throughout the year, and the end of 1957 found us with a rather longer waiting list than has been the case for some years. There is a proposal under consideration to increase the accommodation of the school to provide more classroom accommodation and better facilities for handwork.

The visits of Mr. Lucas, the Orthopaedic Surgeon, have been much appreciated and his advice on the care of physically handicapped children is of great assistance. Few children are admitted to the school at the age of five since it is realised that most children of this age can be better accommodated in the

local infants' school for at least the first year of their school life. Increasing attention is being paid to the psychological needs of the children at the school and more of the time of the psychologists could be used with advantage. These children suffer not only because of their physical handicap but often from their emotional failure to adjust easily to their disabilities. The premises are by no means ideal for delicate and physically handicapped children, one of the disadvantages being that the buildings are rather widely separated. Financial stringency however makes it impossible to contemplate any change at the moment.

The following is a summary of the diagnoses of the physically handicapped children who were attending the school at the end of the year.

Old poliomyelitis	21
Cerebral palsy	10
Pseudo-hypertrophic muscular dystrophy ..	6
Heart disease	3
Birth injury	2
Post traumatic hemi-paresis	2
Hydrocephalus	2
Post operation for cerebral tumour	1
T.B. spine	1
Colostomy	1
Spina bifida	1
Congenital dislocation of the hip	1
Hemiplegia following tuberculous meningitis ..	1
Fragilitas ossium	1
Juvenile gout	1
Collier-Adie syndrome	1
Malformed Kidney	1

South Bristol Open Air School

C. Williams

There were 71 boys and 52 girls, a total of 123 pupils on the school roll at the end of the year as follows:

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Delicate	28	24	52
Physically Handicapped	33	23	56
Partially Sighted	10	5	15

In addition to dealing with pupils whose handicap is listed among the three categories above, the teaching staff has to cope with children of limited mental ability. Very often, too, the child of average intelligence comes to us only when frequent or prolonged absence from school, due to indifferent health, has retarded him educationally.

The old "open air school" pupil is disappearing. We have no pupil with rickets and there is really no good reason today for a child to be admitted because of malnutrition. A new type of pupil is now being admitted; those who do not thrive because they are emotionally disturbed and an unstable home background is frequently behind this.

The broad picture of our three units, then, is one of educational sub-normality, plus additional handicaps, and this presents a challenge to the staff.

Our work will be assisted and made more effective when additional classroom space is provided next year, as at present the age and ability range within some of the classes is too great. In addition it has been agreed that the morning "snack" may be dispensed with and that the "rest period" for some pupils may be put to other use.

Thus we hope that we can lessen the disability by making the most of the ability.

Home Teaching

The two home-visiting teachers have continued their valuable work. Petrol rationing at the beginning of the year had less impact than it might have had on this service because both teachers were already skilled in planning their visits with the greatest economy of mileage.

There was again a slight reduction on the previous year's figures in the number of pupils visited, but it will be noticed from the table below that three pupils were admitted to South Bristol Open Air, the parent school.

The end of the year saw 17 pupils being visited (14 boys and 3 girls). The teachers' joint total of visits during the year was approximately 1,500.

During 1957 eighteen pupils (16 boys and 2 girls) were added to the roll. Twenty-one pupils' names were removed from the register for the following reasons:

					<i>Boys</i>	<i>Girls</i>
Returned to ordinary school	..	..	..		13	2
Admitted to Day Open Air School	..	..			2	1
Of special school leaving age	..	..	..		—	1
Died	..	..	..	..	2	—
					—	—
					17	4
					—	—

The pupils being taught range in ability from border-line educability to a pupil being prepared for his G.C.E. (in this case the Committee have agreed to provide some outside tuition in three special subjects). They are all being taught at home either because they are too severely handicapped to attend a special school, or because they are convalescing after illness.

Like their colleagues in the special school the home teachers must battle against backwardness. For the pupils there is a much shorter period of lessons, but they are intensive and much more welcome when they come. The biggest loss is, perhaps, the lack of contact with other children.

Hospital Teaching

This service has been operating on a full-time basis since 1955 and there are now two teachers wholly engaged in this work which covers three general hospitals, the Bristol Children's Hospital, the Bristol Royal Infirmary and the Southmead Hospital.

During 1957, 572 pupils were seen and 4,903 visits were made. Of these pupils, 20 were from Grammar Schools, 58 from Secondary Modern Schools, 493 from Junior Schools and one from a Technical School.

The two teachers have to deal with the varied problems of hospital teaching; the fact that the whole school age range may be found within a ward, the frequent admissions and discharges, the many unavoidable interruptions because of hospital routine, making a planned sequence of class lessons difficult or even impossible. Another difficulty is that although the teachers now have adequate storage space for books and small equipment they have no suitable rooms where they can deal properly with ambulant pupils.

A 16 mm. sound projector has been provided by the Education Committee and is shared between the Bristol Children's Hospital, Bristol Royal Infirmary and the Day Open Air School. Lack of a "black-out" or "daylight" screen at Southmead General Hospital prevents its use there.

Bristol Royal Infirmary has provided a radio set for the use of the teacher and some of the B.B.C.'s school programmes are followed. The Southmead

Hospital library is at the disposal of the teacher there and the Schools' Department of the Public Library is also freely drawn upon by the hospital teaching service.

Both teachers speak warmly of the co-operation of the hospital staffs and it is a tribute to them both that the hospital teaching service is so well appreciated by the hospitals.

The Frenchay Park Hospital School continues to provide education for the children who are in-patients at this Hospital and 434 children received tuition there during 1957. At the end of the year there were 26 children being given tuition (13 boys and 13 girls).

Propaganda on Special Schools

In order to explain more fully and completely the purpose of special educational treatment and to give parents details of our special schools and the facilities provided, a pamphlet has been produced by the Special Services Department.

A copy of this pamphlet, which is attractively printed in two colours and illustrated, is sent to the parent of each child who is recommended for admission to one of the special schools for educationally sub-normal children. The pamphlet is set out in question and answer form and includes photographs of some of the work of the school. The text is as follows:

“ This booklet has been prepared specially for you as the parent of a child whose admission to a special school has been recommended. You will naturally want to know something about special schools, the work that they do and the advantages they offer. In this folder you will find some of the answers to questions that you may have in mind.

What really is my child's difficulty?

Through no fault of his own the rate at which he can learn is slow. His standard of work is seriously below the average for his age and he is probably falling further behind all the time.

Why does he need to attend a special school?

Because he cannot keep pace with the work in an ordinary school. He may realise this himself already and it is quite possible that he will gradually give up the struggle to learn if he is not given special help. He needs much more individual attention and much more time in which to learn and for this a special school is necessary. Left where he is, he is likely to grow more and more discouraged.

In what way is a special school different from the ordinary school and how is my child likely to benefit from the move?

In the first place, the classes are kept small. There are not more than twenty children in each class and often there are fewer. This enables the teachers to give much more help to individual boys and girls and to tackle their problems as they arise.

The slow learner is encouraged by the sympathetic treatment of his difficulties and by the patient understanding which specially trained teachers bring to this kind of work.

Secondly, the social and bodily needs of the child receive particular consideration. He is taught how to look after himself, how to wash and dress, how to conduct himself at meal times, and how to live and work happily with others. Through physical activities of many kinds—movement, exercises, games and country dancing—he learns control as well as delight in using his limbs and muscles.

Thirdly, in this kind of school very special attention is given to the learning difficulties of the children. Books and equipment are carefully chosen to meet special needs. Speech difficulties are tackled through speech training. The approach to lessons is made easy and interesting. As in any other school, reading, writing and arithmetic are part of a programme that includes all the usual school subjects, but much of the work here is practical and closely related to real things that the child can understand. The youngsters learn to use their hands and their eyes and ears to help their minds; they draw and paint and listen to music, they make and use models of many kinds, and they practise various simple crafts. So they come to develop a feeling of mastery and a sense of confidence which they would not otherwise have, and which will stand them in good stead when they leave school for the world outside.

How long do children have to stay at school?

The leaving age so far as special schools are concerned is 16, and the slow learner is very fortunate in having the opportunity to stay at school until then. For upon the training he receives at school his chances of good employment and his life's happiness may largely depend.

How will my child get to and from school?

Transport arrangements will be made for him after you have discussed the matter with the Head of the school. The child can be picked up near his home and taken to school in one of the coaches provided for the purpose. Alternatively, it may be agreed that he can travel by ordinary bus, using a season ticket. In neither case is there any charge to the parents.

What about school meals?

These are provided just as in other schools but the daily charge is less—only 9d. per dinner as compared with 1s. 0d. in ordinary schools.”

Epileptic Children

A.L.S.

Chalfont School for epileptic children closed at the end of the summer term of 1957. Of the five boys in attendance at this school one was due to leave because of age and the remaining four boys were transferred to Lingfield School for epileptic children, Surrey.

There are a number of children with petit mal or epileptic tendencies who are on drug treatment and able to attend an ordinary school. Heads of schools are very willing to accept these children who usually are able to take part in all school activities without difficulty.

At the end of the year the following children were being maintained at a residential school for epileptic children.

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Lingfield Hospital School for epileptic children, Surrey	5	—	5

Spastic Children

Grace E. Woods

Cerebral Palsy Assessment Clinic

The Cerebral Palsy Assessment Clinic has just entered its 7th year, and we have been fortunate in having no changes in the team. Yet, we are still finding new aspects of cerebral palsy to discuss after the weekly clinic. During the year, we have seen slightly fewer new cases, but have been able to keep regular checks on the education, treatment and progress of old cases.

It has become increasingly obvious that the term "cerebral palsy" must be used in its widest sense, to include all cases of defect of movement due to cerebral damage. Because the damage may be either widespread or confined to a small area, and the original aetiology may vary, no two cases are exactly alike, and it is not possible to fit all the cases into known clinical patterns or syndromes. For example, of the last three cases recently seen one was a case apparently following a severe allergic reaction to immunisation. The child's movements are stiff and unco-ordinated, but her worst handicap is a speech defect due to involvement of the motor organ of speech. Her intelligence is within normal limits. The parents had been told in another part of the world that she "was not a spastic", presumably because she had not got a typical scissor gait. However, she can truly be called a case of "cerebral palsy" and the correct placement for her is at Claremont School for Spastic Children, because of her need for speech therapy as well as physiotherapy. Another child was born after a persistent occipito-posterior presentation with white asphyxia. She had microcephaly, presumably due to severe brain damage, epilepsy, and an unusual movement defect which appeared to be a right hemiathetosis superimposed in a spastic quadriplegia—the right arm, though the most useless, had increased girth—due to frequent muscular spasms. A motor involvement of this type had not been seen by the team before. Her correct placement was in a mental deficiency hospital. A third child of 8 years was referred because of delayed development of speech in the presence of apparent understanding and performance skills within normal limits. He had a mild cerebral palsy, and due to mild spasticity he had been late in walking and had only just learnt to go downstairs. His speech defect was partly due to a motor defect of the organs of speech. He could not blow in a normal manner and had slow movements of the tongue. This could not entirely account for the serious lack of speech, and there appeared to be further evidence of an aphasia. He must be considered a brain injured cerebral-palsied child who needs further investigation.

During 1957, particular attention has been paid to deafness in cerebral palsy. Dr. Fisch from the Royal National Throat, Nose and Ear Hospital has paid two prolonged visits to Bristol with his team and has tested a large number of cases by his special technique. A hearing loss in the high frequency range has been noted in cases of athetosis following neonatal jaundice. Several of these children have been fitted with transistor hearing aids, which are so much more useful to children with uncontrolled movements and an irregular hearing loss than are the present National Health Service hearing aids.

A large number of cerebral palsied children have received treatment at the Children's Hospital from Miss Wheatley, physiotherapist, and Miss Potter, occupational therapist. Miss Wheatley has just returned from taking a special course in London on the treatment of cerebral palsy. Others have been treated by Mrs. Iles at Southmead Hospital and by Miss D. Robertson and Miss B. Robertson at the Central Health Clinic. Others have received treatment at Claremont School and at the Bristol Spastic Centre. There has been a very

gratifying and steady progress among nearly all the children, both the mild hemiplegias and paraplegias, the severe spastic quadriplegias, and the athetoids. Several informal meetings have been held at Claremont School, to which those working on cerebral palsy have been invited. These meetings have helped in general co-operation and interest and have been very enjoyable.

The work among cerebral-palsied children in Bristol is being used as a research project under Professor Neale. Particular research is taking place on space perception and electroencephalographic findings. The overall findings on the first 300 Bristol cases have just been published.

Claremont School for Spastic Children

M. Ram

We have had thirty children on the register this year, twenty-three from Bristol, five from the Gloucestershire County area, and one each from the Somerset and Bath Authorities. Five children have left the school during the year; one was found to be ineducable and now attends the Spastic Centre, conducted by the Bristol Branch of the National Spastics Association, one has been transferred to South Bristol Open Air School, and one, a boy with a very slight motor handicap but a severe speech disorder, to St. Christopher's Independent School, Bristol. One child was transferred to an ordinary school and one left with his family to Canada. This boy was a very mild athetoid, with a moderately severe hearing loss. He was equipped with a Medresco hearing aid while at Claremont School and his speech was improving rapidly. In London, Ontario, he has been fortunate in finding a school that is regularly visited by a speech therapist.

When last year's report was written we were much concerned with the problems of our deaf cerebral-palsied children. We have now found that we have two children who are severely deaf and four who have moderate degrees of hearing loss. A considerable amount has now been done towards dealing with these problems. From April, 1958, we shall have a half-time teacher of the deaf on the staff of the school. In the meantime, Miss Sturman, the visiting teacher of the deaf, has been giving us four sessions a week since September, 1957. The school has been equipped with an Amplivox classroom hearing aid, and five children have now been fitted with the small commercial transistor monopak aid which their physical condition and type of hearing loss make necessary.

Several minor innovations have been introduced during the year. Now that we have more older children we have been glad to take advantage of the Schools Library Service organised from the Bedminster Branch Library. This service is clearly even more valuable to our severely handicapped children than to those in ordinary schools, and we are grateful for the consideration that has been given to our special needs.

In our middle group we happen to have several children with hands only mildly affected. We wished to take advantage of this to introduce a modified form of Family Service at the mid-day meal. The School Meals Organiser made this experiment possible, and the children have responded with obvious pleasure, and increased appetite.

We have also experimented with school journeys. Last June the whole school went to the seaside, and in the autumn we took the older children to the Theatre Royal, to see the Western Theatre Ballet. The results were sufficiently encouraging to make staff and children eager for more and better expeditions in the coming year.

HEALTH EDUCATION

A.L.S.

The question of health education in the senior schools has been under active discussion during the year. The Heads of the grammar and secondary modern boys' schools attended a meeting on health education and the curriculum was discussed in a general way. It is quite obvious that many Heads of schools combined the problem of health education with that of sex education and many of them felt that they were not doing enough in this field. It was agreed to ask Dr. Burton of the Central Council for Health Education to come to Bristol and give a talk on health education methods in schools. At a meeting held on 5th April, Dr. Burton gave a talk on health education and spoke of his experiences over many years of lecturing in schools. What impressed those present most was his method of finding out from the pupils what they knew and where their interests lay in health, and then exploring gaps in their knowledge. After this it was possible to lead on to a discussion type of lesson which he personally found more profitable than anything else. At a second meeting, Dr. Dalzell-Ward, the Deputy Medical Director of the Central Council for Health Education, gave a demonstration of the way in which health education could be fitted into the curriculum, and with his health education officer demonstrated methods and media. At a fourth meeting held at Cotham Grammar School with Mr. Woods, the Headmaster, in the Chair, an attempt was made to find out how far Heads of schools thought they needed any special help in connection with health and sex education. On the whole the meeting felt that individual teachers should explore their own particular needs and that there was no indication of a need for a course of instruction to be arranged for teachers in the immediate future.

HEART DISEASE AND RHEUMATISM

C. Bruce Perry

There has been no change in the work of the Cardio-Rheumatic Clinic during 1957. The fall in the incidence of acute rheumatism continues and only 25 attacks, which includes 6 recurrences, were reported in Bristol children during the year. This figure would have been lower but for a small "epidemic" which occurred at the end of the year and continued into the first two months of 1958 in one area of the city.

The W.H.O. report on the prevention of acute rheumatism noted last year has been followed by a very similar report from the Royal College of Physicians of London. Efforts are being made to enlist the co-operation of the child's general practitioner in this prophylactic work as it is felt that such treatment probably falls within the scope of general practice. Only where, for one reason or another, this seems impracticable are arrangements made for the children to receive prophylactic treatment at the hospital and no attempt has been made to establish a clinic for the prevention of rheumatic relapses. It is too soon yet to assess the result of the policy but it is hoped that it will be successful.

Summary of Cases attending Cardio-Rheumatic Clinic, 1957, including Primary, Secondary, Grammar and Nursery Schools.

	No treatment or restriction	No treatment but restriction of games, etc.	Treatment and school	Treatment and exclude from school	Institutional treatment	Total
<i>New cases:</i>						
Rheumatic heart disease	2	—	—	—	10	12
Chorea	—	—	—	—	4	4
No organic disease ..	24	—	1	—	5	30
Congenital heart disease	4	2	—	—	—	6
Various	6	—	—	—	—	6
	36	2	1	—	19	58
<i>Re-examinations:</i>						
Rheumatic heart disease	197	6	1	—	7	211
Chorea	16	—	—	1	—	17
No organic disease ..	359	—	1	—	2	362
Congenital heart disease	73	12	—	—	—	85
Various	11	—	—	—	—	11
	656	18	2	1	9	686
No. of individual children examined	..	..	..	..	432	
No. of new cases for 1957	..	..	..	..	58	
No. of re-examinations	..	..	..	..	686	
Total number of attendances	..	..	..	..	752	

INFECTIOUS DISEASES

A.L.S.

The year 1957 was a "measles" year, there being 3,059 cases among children of school age and 4,050 among children under school age. This figure is, however, fewer than in 1955 when the comparable figures were 4,398 and 4,733.

The fall in the number of cases of whooping cough which was noted last year was not continued, the figure being higher among children of school age than in any year since 1952, though among children of under school age the figure is lower than in recent years except in 1956. Cases of scarlet fever, too, were slightly more numerous in children of school age, though the total number of cases is about the same as last year.

	School age children	Under school age children
Measles	3,059	4,050
Whooping cough	454	535
Scarlet fever	252	73

Admissions of patients of school age to the Infectious Diseases Hospital at Ham Green totalled 281, the average stay of patients being 20.9 days.

Poliomyelitis Vaccination

A.L.S.

With the increased supply of vaccine which became available from the Ministry of Health during 1957 it was possible to offer vaccination to an increased number of children, and during the year 13,885 children of school

age received a complete course of two injections. The age groupings are as follows:

<i>Year of Birth</i>					<i>No. vaccinated</i>
1947	..	..	..	..	3,404
1948	..	..	..	..	3,175
1949	..	..	..	..	2,839
1950	..	..	..	..	2,694
1951	..	..	..	..	1,013
1952	..	..	..	..	760

The number of cases of poliomyelitis amongst children of school age during the year was 29, 20 paralytic (9 boys, 11 girls) and 9 non-paralytic (5 boys, 4 girls).

Immunisation against Diphtheria

The arrangements for the immunisation of children against diphtheria were continued during the year on the same lines as in previous years. The aim is to get as many children as possible immunised before reaching school age and to give a booster injection just before entering school or in the early years of school life. It is pleasing to report that once again there has been no case of diphtheria amongst children of school age during the year and this is the eighth successive year in which this has been the case.

The figures of immunising injections given during the year to children of school age are as follows:

Number given full course of immunising injections	..	163
Number given booster injections	.. .. .	1,755

MEDICAL EXAMINATION OF ENTRANTS TO THE TEACHING PROFESSION

A. L. S.

In accordance with the arrangements outlined in the Ministry of Education Circular 249, the medical examination of candidates applying for entry to training colleges and entrants to the teaching profession were carried out by the Medical Officers of the Local Authority. During the year 183 candidates were examined in connection with admission to or on leaving training colleges and 120 teachers were examined on appointment in Bristol or for some other reason. In a further 51 cases the examination of the teacher was carried out by other Authorities.

MEDICAL INSPECTION

A complete periodic medical inspection was made during the year of 17,789 children attending the Authority's primary, secondary and special schools. The statistical tables relating to these inspections can be found at the end of the report.

Co-operation of parents

The number of parents present at periodic medical inspections in the prescribed groups during the year was as follows:

		<i>No. examined</i>	<i>Parents present</i>	<i>Percentage</i>
1st age group (Entrants)	..	4,225	3,759	88.97
2nd age group	..	5,687	4,665	82.03
3rd age group	..	4,487	1,399	31.18
Total	..	14,399	9,823	68.22

The percentage of parents present in recent years is shown in the following table:

	1955	1956	1957
Entrants	87.93	87.75	88.97
Second age group	76.24	75.87	82.03
Third age group	28.17	26.32	31.18

It will be seen that the percentage of parents present in 1957 is the highest for some years past, and there seems to be a real indication of greater interest in medical inspection. This interest may have been stimulated by the introduction of a revised notice of invitation to parents to attend medical inspection in which parents have been invited to supply more detailed information about the child's illnesses and medical history. The fact that rather smaller numbers of children are presented at each session gives the doctor a reasonable opportunity to discuss with the parent any details about the health of the child. The presence of the parent at the inspection is of very great help to the examining doctor and it is hoped that this increased interest and attendance will continue.

MILK AND MEALS IN SCHOOLS

T. B. J. Hetherington

The annual return taken in November showed that 23,186 children were taking school dinners (1,914 free and 21,272 on payment) or 37.19 per cent. of the number of children in attendance. This is a decrease of 0.75 per cent. on the figure for 1956. During the year kitchens were opened in the new Elmlea Primary and Redhouse Primary Schools and a second kitchen at Henbury Secondary School. The kitchen at Headley Park Primary School was also opened. For the first time for many years kitchens were also provided at four existing Schools, viz. Hillfields Park J.M. (including a dining room), Hillfields Park Infants, St. Nicholas R.C. Primary and Summerhill Primary. The kitchens at Chester Park Primary, Portway Secondary Boys (Penpole) and St. George Grammar Schools, all of which were sub-standard, were closed during the year, but approval has been received from the Ministry of Education for the erection of a new kitchen and dining room at St. George Grammar School.

The charge for dinners was again increased during this year, by 2d. per dinner from 1st April, 1957. The immediate result was a decrease of 2,000 dinners per day but, by November, 1957, the actual number of children taking dinners was slightly higher than in October, 1956, although the percentage was lower owing to the additional number of children at school.

In November, 52,234 children were taking milk, under the milk-in-schools scheme, a percentage of 83.59 of the children in attendance. This was a decrease on the figure for 1956 which was 87.62 per cent.

The number of kitchens now totals 84 and these range in size from 25 to 1,900 meals per day, producing a total of 26,500 daily, including staff meals.

During the early part of the year the Service was maintained with considerable difficulty owing to the illness of staff. The staffing situation eased somewhat in the Summer Term, but the exceptionally hot weather brought further absence and even greater vigilance was exercised regarding personal and kitchen hygiene. Food costs rose considerably and difficulty was experienced with perishable goods. The Ministry of Education carried out a survey of school meals throughout the same term. Many of the recommendations made regarding hygiene and buildings will, however, be possible only when the finances allow.

With the Autumn Term came a great fluctuation in the number of meals served, due to the influenza epidemic and numbers varied considerably from

day to day at each school. This situation was acute until October and continued in a milder way until the end of term. Again the kitchens suffered many casualties and staff were warned to take additional hygiene precautions.

The ruling regarding the pre-cooking of food has been further emphasised by the Committee when it agreed that staff dismissals may take place if this rule is disregarded. Constant attention has been required to relate the nutritional requirements of the meal to the cost, especially with such long periods of fluctuating numbers.

MILK, FOOD AND HYGIENE INSPECTIONS F. J. Redstone

The Food Hygiene Regulations, 1955, apply to canteens, clubs, schools, hospitals and institutions, whether carried on for profit or not by a public or local authority.

Those responsible for the administration of the school meals service are very conscious of the need to reach and maintain the highest possible standards of hygiene in the storerooms, kitchens and distribution arrangements.

The Public Health Inspectors carried out 102 visits of inspection at school kitchen establishments during the year. It is recognised, however, that inspection alone is not enough and it is essential that all catering staff should be aware of both the danger arising from food infections and the precautions that must be taken to reduce risk.

The principles of kitchen hygiene are indeed so simple that they have been expressed in two sentences.

First, all those engaged in the storage, preparation and sale of food should observe cleanliness in themselves, cleanliness in their place of work and cleanliness in their utensils. Second, the handling of food should be reduced to the minimum.

That these principles are fairly well established in the school meals service is seen by the fact that, in spite of the enormous number of meals provided, the food inspection section of the Health Department was not called upon to investigate a single outbreak of food-borne disease at any of the school kitchens during the year.

Many visits were made by the Meat Inspectors to check the quality of contract meat supplies to schools and no difficulties were experienced in this connection.

The sampling of school milk supplies proceeded in accordance with usual practice and the 174 samples of pasteurised milk all satisfied the test for efficiency of heat treatment. The methylene blue keeping quality test was not applied to 43 of these samples because the storage temperature was above 65° F. The remainder, which were tested, proved satisfactory. Some additional samples were submitted to the Public Analyst for chemical analysis with no adverse reports.

A total number of 430 samples of miscellaneous foods was secured for examination and submitted to the Public Analyst from school kitchens at the following schools: Marksbury Road, Rose Green, St. Patrick's, Stoke Bishop, Novers Lane and Open Air School, Sea Mills, Speedwell and Glenfrome.

Three samples were infested with insects; two had deteriorated and one contained a piece of metal. Dried onions contained preservatives although not included in the permissive list of foods to which preservative may be added, and a sample of vinegar was deficient in acetic acid.

Appropriate action was taken in each case.

MINOR AILMENTS

A. L. S.

It might be thought that the minor ailment service is one which could be discontinued since there is a possibility that a child with any ailment could be treated by its own general practitioner. In fact in many areas of the City the need for minor ailment clinics is considerably less than others because the parents themselves do what is necessary for the treatment of their children suffering from minor ailments and injuries, and if they cannot themselves treat the child then he is taken to the general practitioner for advice. However, it must be recognised that in some areas of the City parents have come to rely on the clinics for the treatment of their children, often for the most trivial of ailments, and they come to rely on the school service for detecting and treating those conditions needing medical attention. If there were no minor ailment service it is almost certain that the general practitioners would be faced with much more work at their surgeries, and would encounter more serious conditions which the minor ailment service is designed to prevent. This is not to say that some children do not use the minor ailment service sometimes to escape from school. It is still fairly easy to escape from a not pleasant school situation to the clinic, although we have made arrangements to avoid this as far as possible at the clinics and in some cases by making arrangements for the pupils attending the senior schools to attend the clinic after school hours. It must also be recognised that the minor ailment service provides a priority service for children who do not have to compete with adults in the crowded surgeries of the general practitioners, and they are not called upon to pay for medical dressings and other requirements which, if prescribed by the general practitioner, will entail a payment of 1/- for each item. The teachers also appreciate having such a service available to them to take the responsibility of dealing with minor disabilities and injuries that occur in the schools. Indeed, in one area of the City a request was made that there should be a first-aid casualty service available for all the hours during the day the school was opened. This was not found to be possible but it was pointed out that the schools themselves could do something to meet the situation by the teachers taking a first-aid course, and there was an overwhelming response to invitations to attend such a course which will be arranged early in the new year.

Ringworm

A. L. S.

I mentioned in the report for 1956 the arrangements that had been made because of the decline in the number of cases of scalp ringworm to allow children having drug treatment to attend school, provided the scalp is covered with a protective covering. This does not appear to have given rise to any untoward effects and the number of cases of scalp ringworm continues to be very low. Those cases that do arise are treated at the skin department of the Bristol General Hospital. The number of cases of body ringworm amongst school children treated at the Authority's clinics during the year was 272. This compares with 360 in 1956.

Infestation

The decline in the percentage of children found to be infested with vermin which has now been observed for the past few years continued in 1957. The number of individual pupils found to be infested during the year was 1,841 which gives a figure of 2.8 per cent. of the school population. A large proportion of the children found to be infested nowadays are the continuous offenders, and though the question of prosecution has been considered, the complexity of the legal proceedings makes this somewhat difficult. However,

these children are kept under close observation and constant pressure is exerted to effect an improvement. The figures relating to the number of pupils found to be infested with vermin over the last six years are as follows:

				No.	School population	Per cent.
1952	..	..	..	2,674	59,855	4.5
1953	..	..	..	2,990	62,182	4.8
1954	..	..	..	2,773	63,573	4.4
1955	..	..	..	2,347	65,177	3.6
1956	..	..	..	2,133	65,979	3.2
1957	..	..	..	1,841	66,439	2.8

NURSERY SCHOOLS AND CLASSES

At the end of the year there were 14 nursery schools accommodating 970 children, and 16 infants' schools with nursery classes with accommodation for 165 children. An experiment has been made in two nursery schools by arranging for some of the children to attend either in the mornings or in the afternoons on a shift basis. This experiment seems to have been entirely successful, and its extension to some other nursery schools is under consideration. The statistics relating to the medical inspections held in the nursery schools and classes during the year are as follows:

					Periodic exams	Re-exams	
Nursery schools	..	..	..	..	629	1,712	
Nursery classes	..	..	..	..	378	974	
Number of special inspections and re-inspections	..	..	..	..			258

Classification of Nutrition

	Number of children inspected	Satisfactory No.	%	Unsatisfactory No.	%
Nursery schools	629	615	97.77	14	2.23
Nursery classes	378	367	97.00	11	3.00

Treatment of Minor Ailments

No. of defects treated in clinics and at schools and classes	..	2,038
--	----	-------

Treatment of Defective Vision and Squint

Errors of refraction (including squint) ..	..	..	..	..	32
No. of pupils for whom spectacles were prescribed	..	..	..	..	11

Dental Inspection and Treatment

No. of pupils inspected by the dentist—	Periodic inspections	..	756
	—Special inspections	..	113
	TOTAL	..	869
No. found to require treatment	..	..	439
No. actually treated	..	..	200
Attendances for treatment	..	..	273
Extractions of temporary teeth	..	..	262
Fillings of temporary teeth	..	..	65
Administrations of general anaesthetics for extractions	..	..	126
Other operations on temporary teeth	..	..	180

Medical Treatment of the Pre-School Child

Eye diseases	..	..	..	..	..	..	..	..	49
Ear diseases	..	..	..	..	..	..	..	..	30
Skin diseases	..	..	..	..	..	..	..	..	128
Minor ailments	..	..	..	..	..	..	..	..	23
Aural Surgeon's cases	..	..	..	..	..	..	..	..	61
Eye Specialists' cases	..	..	..	..	..	..	..	..	115
Heart Specialist's cases	..	..	..	..	..	..	..	..	4
Orthopaedic Specialists' cases	..	..	..	..	..	..	..	..	63
Chiropody Clinic cases	..	..	..	..	..	..	..	..	4
Skin Consultants' cases	..	..	..	..	..	..	..	..	26
Enuretic Clinic cases	..	..	..	..	..	..	..	..	22
T.B. Contact cases	..	..	..	..	..	..	..	..	136
Children's Chest Clinic	..	..	..	..	..	..	..	..	8
Wart Clinic	..	..	..	..	..	..	..	..	1
Various	..	..	..	..	..	..	..	..	251
									<hr/> 921 <hr/>

NUTRITION CLINIC

Margaret Chapman

A further 98 children attended the Nutrition Clinic during 1957, chiefly because of excessive gain in weight. Altogether 482 attendances were made during the year and 60 children were attending at the end of the year.

The children have been referred through various sources: the Orthopaedic, Asthma and Enuresis Clinics and at the parents' own request, as well as through periodic medical inspections, and it is encouraging to find that it is being more generally recognised that overweight aggravates or precipitates many other maladies, and that parents are willing to seek advice and take some positive action.

Many parents fear that a "reducing diet" for children must be harmful, so that care is taken to explain that the suggested dietary plan is properly balanced, provides all the essentials for normal growth and development, and that general health can only benefit from weight becoming more normal. Nevertheless, advice to the contrary from relatives and friends, coupled with a certain reluctance to deprive a child of sweetmeats (recognised symbols of affection and reward) easily persuades many to give up any attempt to alter feeding habits, consequently the number who fail to keep successive appointments is comparatively high. However, of the children referred during the previous year and still attending, 20 have adjusted their diet so that weight gain has been stationary or normal, over a period of at least 12 months, and some measure of improvement has been shown by most who have attended even for a short while.

There is a general tendency to put on weight during the holidays, even with children in whom weight has been controlled consistently throughout the school term. Most of the parents report that while the suggested dietary regime is accepted fairly well during the term, they have difficulty, during the holidays, in combating the constant refrain of "I'm starving, isn't there anything to eat?" uttered whenever the child is unoccupied for a few moments, and in turning a deaf ear to the claxon signature tune of the ice-cream man.

This substantiates the belief that overweight is more often due to the quantity of carbohydrate snacks and sweets eaten between meals, rather than to the amount of food consumed at a meal itself, and is reflected in the National Food Survey figures which show that the consumption of sugar and of chocolate and sugar confectionery is considerably higher than in pre-war days.

ORTHOPAEDIC AND POSTURAL DEFECTS

A. L. S.

The arrangements whereby Mr. Pridie and Mr. Jones, the Orthopaedic Surgeons of the Regional Hospital Board, attend the Central Health Clinic for one session per week were continued during the year. There has been relatively little change in the types of cases seen. The number of children with congenital abnormalities of bones and joints which showed a fall in 1956 has risen again to about the same level as in 1955. The total number of children seen, however, shows a fall of about a hundred from the previous year. Mr. Lucas, the Orthopaedic Surgeon, continued to attend once a term at South Bristol Open Air School and Claremont School for Spastic children and his advice is much appreciated.

The details of the children seen at the clinic during the year are as follows:

	<i>Age five years and over</i>	<i>Age under five years</i>
Paralysis (a) Flaccid	49	—
(b) Spastic	20	1
Tuberculosis of bones and joints	4	—
Congenital abnormalities of bones and joints	46	3
Amputations	—	—
Genu valgum	43	14
Various (Flat foot, spinal curvature, etc.) ..	484	47
	<hr/> 646	<hr/> 65

PHYSICAL EDUCATION

J. McA. Milne

The opening of one new and the extensions to two existing Secondary Schools have resulted in additional facilities for physical education in the City. Two new gymnasias and one swimming bath are available and this brings the total of school gymnasias constructed since the war to 14. The improvement in the facilities has attracted more fully qualified physical education staff—in 1948 there were 4 men with a third-year qualification in Physical Education, now there are 25. On the girls' side there are now 16 three-year trained specialists and another four teachers who have attended a supplementary year's course in the subject. This compares with 4 in 1939. This combination of better conditions and staff has improved the standard of all games for both sexes.

A schools' section of the Bristol County Netball Association was formed in January, 1957. Over 18 schools have now affiliated. A tournament was held in October and the winning teams in (a) an over 15 year old section and (b) an under 15 year old section were chosen to represent Bristol against Gloucestershire, when each County won one match. Two tournaments open to all Bristol schools were also held, and over 40 teams took part. A very successful Netball Coaching Course was held in November, when Miss Burnett, of the All-England Netball Association, explained the new rules to over 60 members of school staffs and clubs.

Miss Flew, the All-England Women's Hockey Association Coach, came to Bristol at the beginning of the season and gave coaching in four centres when staff from 13 schools attended. A hockey tournament in which 15 teams took part was held at the Imperial Grounds. Rounder tournaments were held for Primary and Secondary Schools in four centres.

The growth of basket ball has increased and there are now 25 schools playing the game regularly. A course for coaches and referees was organised in October and four teachers successfully qualified. Bristol Schools' Basket Ball Association played a very prominent part in the formation this year of the English Schools' Basket Ball Association.

Two refresher courses in Physical Education were held for teachers in Primary Schools and were attended by 83 teachers. A course for teachers in Secondary Schools was arranged in conjunction with Redland Training College by kind permission of the Principal. Parent-teachers meetings have again been held when the subject dealt with has been on the positive health of school children.

A health course was arranged for Heads and Staff of Secondary Schools in Boys' Departments and was conducted by Dr. John Burton and Dr. Dalzell-Ward of the Central Council for Health Education.

School Medical Officers who were attending a refresher course in Bristol visited a primary and secondary school to see and discuss the modern approach to Physical Education.

The swimming bath at Bedminster Down County Secondary School opened in September. This has proved an invaluable addition to the physical education amenities in that area, for primary schools hitherto unable, because of the distance from public baths, to include swimming instruction in the curriculum, are allowed to send weekly classes to the swimming bath. The standard of swimming generally in the City is being maintained and Janet Edwards, a pupil of Speedwell Secondary Girls School, won the A.A.A. National Junior back crawl championship in September. Corporation Swimming Certificates gained this year number 4,687 compared with 4,270 in 1956. These figures include both the 100 yards and the half mile certificate winners. In addition, 1,215 Life Saving Association awards were obtained during the year.

Two children's country dance parties took place again this year and proved very successful. Some schools took part in the National Folk Dance Festival organised by the Youth Committee. This year the schools were privileged in having the opportunity to hear talks given by members of the Festival Ballet, as well as seeing a professional ballet class at the Hippodrome.

A most successful course in Scottish Country Dancing was held one weekend and many teachers took part.

Bristol was invited to take part in the pilot scheme of the Duke of Edinburgh's award and boys from four secondary schools prepared for the tests which were taken in July. Seventeen boys from Baptist Mills Secondary Mixed, 18 from Greenway Secondary Boys, 24 from Hengrove County Secondary, and 18 from Connaught Road Secondary Boys' School were successful in gaining the Bronze Award and a number are continuing their studies to qualify for the Silver Award.

Many schools in the City have been sending parties of children to organised camps at Exmouth, Wareham, Winscombe and a number of other sites which have been hired independently. During the past year 30 schools participated and it is anticipated that this activity will increase in the future. The Scottish Education Authorities have for some years organised an international camp for senior grammar school pupils, and 5 boys and 5 girls with Mr. G. Douel, of Cotham Grammar School, accepted the invitation to attend in August. The theme as in former years was "Citizenship," and as the report from the leader of the party was most encouraging, it is expected that some senior pupils will attend annually.

The playing field acreage continues to increase but the accent is now on improving existing rather than constructing new playing fields.

The voluntary organisations continue to be very active in the field of major games, particularly swimming, association football, cricket, rugby football, basketball and athletics, and opportunities for taking part are given to all children who show ability in any branch of physical education.

PSYCHOLOGICAL SERVICE

R. V. Saunders

Statistics for 1957

Examinations—C.G.C. cases	362
Assessments—other than C.G.C. cases	776
Juvenile court reports by psychologists	161
Treatment/coaching interviews	1,010
Parent interviews	122
Other interviews	15
School visits—on C.G.C. cases	104

On Children who Fall Behind Educationally

1. *Children of Inferior Mental Ability*

In Bristol these children are dealt with either in special classes or in special schools for educationally subnormal children. The setting up of these special classes in several areas of the City has tended to produce the situation where the rather more able educationally subnormal children in those areas are kept in the local special class, and only those who are unable to cope even with this adjustment of the ordinary school environment are passed on to the more completely sheltered environment of the special school. The effect on the latter has been that, since these classes were established, they have been receiving from a large part of Bristol only the intellectually poorer half of the child E.S.N. population, and have been receiving the intellectually rather better E.S.N. children only from those areas which are not served by a special class.

The two chief points for discussion which appear to emerge from consideration of the foregoing seem to be:

- (a) The possibility of the logical completion of the system by establishing enough special classes to cover the whole City, catering for the needs of children of primary and secondary age.
- (b) The possible need for re-thinking regarding the role of the special schools in view of the change in the nature of the main special school population.

2. *Children who are Educationally Retarded Because of Reasons other than Inferior Ability*

There are in the Bristol day school population at any time a number of children of average or better ability who are failing to realise their educational capacity for reasons which vary from perceptual disorders or schooling missed through illness, to those forms of retardation which depend more on attitudes to life, school life in particular, and to people (whether they be other children or teachers).

Such children can best be helped by individual treatment or treatment in small groups, and some authorities have found that the majority of them can best be helped by attention to their personal adjustment. At the moment in Bristol only a comparatively small number of these children, chiefly from the group with problems of adjustment, are getting, through the limited resources of the Child Guidance Clinic, the support they need. The others, in particular the rather large group whose problems are more purely "tutorial," are dependent on the chance that, somehow, their schools can contrive to give them a modicum of individual help. In present conditions this can be very difficult to arrange.

SPEECH CLINICS

Southern Area

Kathleen Coleman

Speech therapy has continued steadily throughout the year, more work being done with stammerers than with speech defects, although the numbers of the two types of cases have been fairly even. Time has also been given to help prepare very shy children for school by increasing their confidence. Although many of these children are not ready for speech therapy, they cannot but benefit by this treatment, and maybe it will mean that there will be less children who, though well able to speak, refrain from doing so at school. A few cases of this type crop up each year, and if they get through to senior school and are not speaking, they present a considerable problem.

Our method of working with stammerers has progressed, and by working daily for up to two to three weeks it is possible to ease the severe symptoms of the stammerer. The advantage of this is evident, and strongly supports the practice of daily treatment: the less severe difficulties of the stammerer can be dealt with by weekly attendance.

So many cases of stammer have improved on our particular method of relaxation only, that one wonders if many cases of so-called stammer are not, in fact, due to the speed at which the child speaks. The psychological factor might well arise from the speech difficulty thus developed and not the speech difficulty from the psychological factor, as is the case with a true stammer.

The excellent surgery being performed at an early age on children with cleft palate is reducing the number of cases of "cleft palate" speech. This is an undisguised blessing, as the great difficulty with cleft palate cases is to get the children to use, in everyday speech, the admirable diction they acquire in the speech clinic and which they appear to keep reserved for their visits there.

The speech therapy sessions held at Knowle Junior and Connaught Road Junior Boys' Schools have been very rewarding and the children have worked well. A venture at Novers Lane Junior School was pleasing and again the children worked well, but the maintenance of so much work in the schools presents considerable difficulties. The whole-hearted co-operation and interest of the staff of these schools is much appreciated and of great help.

The clinic at Granby House has continued through the year, and serves the Hartcliffe area as well as Bedminster.

Parents have, not infrequently, consulted us about a behaviour difficulty while the child is attending for speech therapy, and in an attempt to help, our method of relaxing has been tried and proved most helpful. The following are details of two interesting cases:

Derek, a charming four-year-old, came to see us about his stammer. Mother gave her opinion that it was due to the temper outbursts of his sister, which no-one could control. An invitation was sent for the sister to come and see us, we enlisted her co-operation, worked with her on relaxation, and gradually her "temper tantrums" ceased, and in six weeks all difficulties with Derek and his sister had been resolved. It was interesting how eager was this eleven-year-old girl to put right her difficulties of which she was well aware.

Pauline, a pale and shy seven-year-old, came about her defect of speech, but her shyness was a matter of concern. The school reported that she burst into tears if spoken to, so an attempt was made to build up her confidence with play. Four weeks showed such an improvement that her school was consulted, and reported that she was now an eager, willing child. Mother, however,

reported “continuous temper tantrums” at home. We relaxed Pauline at her next session, and her mother reported that from then her “temper tantrums” ceased. She was a very adequate member of society when she left us at the end of three months, and her speech defect corrected itself without any speech work, as her difficulties were resolved.

A response of this kind to our relaxation therapy is not uncommon with children with behaviour difficulties, but we are unable, so far, to estimate the value of it to the child.

Behaviour problems with speech defective children cannot be ignored, for one seldom gets a speech defective child without an accompanying psychological difficulty, be it only a small one. Defective speech so often is the reflection or symptom of an emotional difficulty, and not a difficulty in itself.

The statistics for the year are as follows:

No. cases in attendance 1st January, 1957	..	..	..	53
No. cases in attendance 31st December, 1957	Stammer	16		
	Defect	9		
		—		25
No. new cases	..	..	..
	Stammer	58		
	Defect	42		
		—		100
No. discharged	..	..	..
	Stammer	68		
	Defect	60		
		—		128
Total number attendances	..	..	..	1,912
Total number children attending during year	..	..	..	153

Northern Area

Rosemary Morris

During the year, speech therapy sessions have been held at one of the secondary modern schools for boys and at Henbury Manor Special School for junior E.S.N. children, as well as at the Portway and Southmead Health Clinics.

At the secondary school there were a number of boys whose progress at school was being retarded because of their stammer. After a term's work, they had all improved sufficiently for the visits to the school to be discontinued, though one or two of them continued to have treatment at a nearby clinic. Although it is often not a good idea to treat children at school, since the informal atmosphere of the speech clinic does in itself seem to have a beneficial effect, in this case it was found to be successful. One of the reasons why this was so was because any difficulties the boys encountered in their classrooms could be “sorted out” on the spot—thanks to the co-operation of the teaching staff.

At Henbury Manor Special School the percentage of children with speech defects is, naturally enough, considerably higher than at other schools. There were more children with poor speech than could be treated during one afternoon a week, so that only the older children were dealt with by the therapist. As the parents of these children do not usually visit the school, one of the members of the staff kindly agreed to give the children the daily practice they need, and, although progress is slow, there is a gradual improvement in these children's speech.

The rest of the work of the clinic has continued as before. It is encouraging to note that Head Teachers are becoming more aware of the facilities provided by the speech clinic—shown by the fact that they are recommending an increasing number of children for speech therapy. When several children from one school are referred, the therapist always tries to pay at least one visit to the school in order to discuss the children with their teachers.

Some Interesting Cases

M. aged 12.—As this boy has muscular dystrophy and is unable to walk, he was treated at home. When he was first seen he stammered so badly that there were frequent pauses of several seconds' duration while he tried to "get out" what he was trying to say. The interesting thing about this boy was that it seemed to me that the causes of the stammer were largely physical, due to hypertension of the speech musculature and an incorrect breathing pattern, as opposed to some emotional disturbance which underlies most stammers. The boy responded well to breathing exercises and relaxation, and his speech became much more fluent.

C. aged 7.—This little girl had severe dyslalia, and because of aggressive behaviour was at first difficult to handle. Underlying both her poor speech and her aggression were emotional difficulties, due to partial rejection by her father, jealousy of her younger sister, spoiling by her grandparents and a harassed mother who seemingly had little idea how to cope with her difficult daughter. However, when eventually I was able to win the child's confidence, her speech began to improve, and now, after 9 months' treatment, she is understandable, even though her speech is not yet up to standard for her age. Her jealousy of her sister has almost gone, but her behaviour, though improved, still at times shows marked aggression which will not, I think, disappear until her father shows her more attention and affection.

Numbers 1957

No. commencing treatment during year	..	..	81
No. discharged	..	..	74
No. referred to Child Guidance Clinic	..	..	1
No. in attendance December 31st, 1957	..	..	63
No. of cases resting	..	..	18
No. treated	..	..	164
No. of attendances	..	..	1,543

Types of cases in attendance December, 1957

Dyslalia	..	..	..	43
Stammer	..	..	..	14
Cleft palate	..	..	..	4
Dysphonia	..	..	..	1
Partially deaf	..	..	..	1

Speech Therapy at Claremont School for Spastic Children

Beryl Bolwell

The past year has been particularly marked by the progress made in assessing the numbers, and degree of severity, of the children at Claremont School suffering from a hearing loss. In January and May, visits were paid to the school by Dr. L. Fisch, and two audiometric technicians, from the Audiology Unit, Royal National Throat, Nose and Ear Hospital, London, who made a survey of all children attending the school, whether or not a hearing loss was suspected. Results showed that a high proportion of children had some degree of loss. Of these, the majority of whom were athetoids, seven were felt to be in need of a hearing aid, and specialised auditory training.

Since September the Authority's peripatetic teacher of the deaf has visited the school four mornings weekly, and she has taken over entirely the training of two children who were found to be severely deaf and is giving auditory training to the remainder. This has relieved the speech therapist of some work, although three of the children are still felt to be in need of speech therapy. In one case, where because of a severe physical handicap there is great difficulty in assessing a child suspected of having a hearing loss, the teacher of the deaf

and the speech therapist are co-operating in an endeavour to obtain a reliable estimate. This is a very slow process and may take many months.

Of the remaining children receiving speech therapy the greatest number have executive speech difficulties directly associated with their physical condition. It is in these cases that the advice and co-operation of the physiotherapist treating the case is so valuable. As is to be expected when treating cerebral palsied children, progress is slow, but nevertheless it is felt that improvement is possible. One child with an executive language defect or motor aphasia has gradually improved until, at the end of the year, he was producing short intelligible phrases, in addition to single words. He now attends St. Christopher's School.

In September the College of Speech Therapists held a three-day conference on cerebral palsy in London, which I attended. All aspects of work for the cerebral palsied were covered, and in particular, the emotional problems of adolescence, with special reference to social relationships, where adequate speech is of paramount importance.

The figures for the past year are given below:

Number of children under treatment 1st January, 1957	..	15
Number of children admitted during the year	.. ..	3
Number of children transferred to teacher of the deaf	..	4
Number of children discharged—excluded as ineducable	..	1
Number of children discharged—to St. Christopher's School		1
Number of children under treatment 31st December, 1957	..	12
Number of treatments given during 1957	.. ..	1,113

SUNLIGHT CLINIC

During 1957, 84 children of school age and 5 children at nursery schools were given a course of artificial sunlight treatment. Details of the cases are given below:

<i>Defect</i>	<i>Prim. Secy. and Gram. Schools</i>			<i>Nursery Schools</i>		
	<i>No. Treated</i>	<i>No. completed</i>	<i>No. not completed</i>	<i>No. Treated</i>	<i>No. completed</i>	<i>No. not completed</i>
General debility	23	14	9	1	—	1
Bronchitis ..	12	9	3	—	—	—
Cough	2	2	—	—	—	—
Enlarged glands	3	1	2	—	—	—
Malnutrition ..	—	—	—	—	—	—
Miscellaneous	44	36	8	4	—	4
Total ..	84	62	22	5	—	5

TUBERCULOSIS

Children's Contact Clinic

Mary D. Gibson

The year 1957 has produced no alteration in the running of the Children's Contact Clinic. The policy of treating children with clinical and/or radiological evidence of an active primary tubercular infection, adopted after the 1956 British Tuberculosis Conference, has been continued.

So far, 9 such children have been treated uneventfully at home with the co-operation of their family doctors, who have provided the necessary antibiotics through the National Health Service.

With one other child, it was felt that admission to hospital was advisable when she failed to make satisfactory progress after three months on chemotherapy at home.

One boy with a pleural effusion was admitted to hospital immediately.

When a child is not well enough to attend school for the first month or two of treatment, home teaching is arranged and does much to keep the child contented and co-operative as well as keeping school work up to date.

The number of cases of bone and renal tubercle, of T.B. meningitis and miliary T.B. notified in Bristol for 1957 remains small but fairly constant compared with the figures for the past eight years, so that it will be of great interest to know if the policy of treating primary tubercle during its early haematogenous phase will be effective in preventing these tragedies occurring in children who have received treatment.

Of course until there is an even better check-up of unknown adult sources of infection, we are bound to get a few such cases in children where the primary phase of infection has not been detected.

The total number of attendances made at the clinic during the year was 625, and 155 children were discharged as not being in need of further supervision.

B.C.G. Vaccination in Thirteen Year Old School Children

A. M. McFarlan

Protection against tuberculosis was again offered to thirteen-year-old school children in 1957 and was accepted by the parents of 3,187 children of whom 2,841 were vaccinated.

Since the scheme started in 1954, the figures have been:

<i>Acceptances</i>				<i>Tuberculin Positive</i>		<i>Vaccinated (Tuberculin Negative)</i>
				<i>Number</i>	<i>%</i>	
1954	..	..	988	171	17.2	817
1955	..	..	3,833	618	16.1	3,215
*1956	..	..	3,803	524	13.7	3,279
1957	..	..	3,187	346	10.9	2,841

* 1956 Corrected figures.

The percentage found tuberculin positive has fallen in each year. This is reassuring in so far as it indicates a reduction in the number of children who have already been infected, and probably therefore a reduction in the sources of infection. It also means, however, that an increasingly large proportion of thirteen-year-old children require protection by B.C.G. before leaving school and entering on the age period in which the incidence of tuberculosis is high. It is important therefore that parents should be encouraged to accept B.C.G. vaccination and that Head Teachers should continue to emphasise its importance.

Mass Radiography

F. B. Richards

The arrangements for the mass radiography of children due to leave school were continued during the year, on the same lines as in previous years, and 4,035 children were X-rayed through the Mass Radiography Service. The percentage of active cases of tuberculosis found during this period is extremely low. The details of the cases are given below:

				<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Miniature films	..	..	..	2,120	1,915	4,035
Recalled for large films	..	..	..	20	19	39
Normal large films	..	..	..	11	9	20
Did not attend	..	..	..	—	—	—
Significant cases	..	..	..	6	9	15
Observation cases	..	..	..	3	1	4

Analysis of Significant Cases

Of the significant cases, 6 were found on clinical examination to have non-tuberculous conditions as set out below:

<i>Condition</i>	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Fusion of 8th and 9th ribs	1	—	1
Abnormality of bony thorax	—	1	1
Congenital cardiac lesion	—	1	1
Pulmonary fibrosis	1	—	1
Bacterial and virus infections of lungs	—	1	1
Accessory lobe of lung	—	1	1
TOTAL	2	4	6

The remaining cases were found to have varying degrees of tuberculous conditions as follows:

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Active Tuberculosis	1	—	1
Inactive	2	4	6
Under observation	1	1	2

X-ray of Teachers

A. L. S.

The arrangements for the routine X-ray of teachers outlined in the report of 1956 were continued during the year, and 761 teachers were X-rayed out of 1,204 who were given appointments. Of these, 24 teachers were recalled to have large films taken. The result of these large films showed no active lesion of lung in 9 cases; in 10 other cases the X-ray showed evidence of old T.B. which was judged inactive; in two cases the X-ray showed collapse of lung. One teacher whose large film showed a secondary carcinoma died during the year. One other teacher was referred to the chest clinic for clinical assessment but the conclusion was that he was not suffering from active disease. One woman teacher was found to have an active tuberculous infection. She responded well to treatment at home but at the end of the year she had not returned to teaching.

There still seems to be some reluctance among teachers to accept this scheme, and this reluctance seems to be more marked among women than men. To many teachers, a year seems to be a short interval of time and there is some resistance to the idea of chest X-rays at yearly intervals. To some, the supposed dangers of radiation may seem to be important because of the publicity that has been given to this point. In this connection an extract from the *British Medical Journal* of November, 1957, may be of interest. It is as follows:

“There is no evidence that radiography of the chest, miniature or full-size, involves any genetic or other hazard to the person X-rayed. The rigorous standards of the Medical Research Council’s report permit 250 miniature or 1,000 large X-ray films to be taken during any one individual’s lifetime, using present techniques. People in contact with children should be X-rayed annually, irrespective of their age. People whose work exposes them to the risk of tuberculous infection should have a six-monthly radiograph up to the age of 30, and an annual radiograph after that age. Mass radiography surveys carry no genetic or other risk.”

YOUTH EMPLOYMENT DEPARTMENT

The Employment of Handicapped Children

B. M. Dyer

During this year the employment position has not been quite as good as in previous years and in particular the position has worsened for educationally sub-normal boys, largely through the general contraction in building operations. As will be seen by the specific reports which follow, the physically handicapped have not presented a great problem, except for the epileptics who have always presented this Department with the hardest of its problems.

Physically Handicapped School-leavers

Two girls and 2 boys left the Elmfield School for the Deaf and all found jobs, one boy as an apprentice in carpentry and joinery.

Two girls and 5 boys left the Open Air School and all obtained suitable employment and appear to have settled down.

During the year 12 girls and 9 boys were added to the Register of Disabled Persons, and at the end of December there were 19 boys and 20 girls on the Register.

As in previous years the Ministry of Labour's Industrial Rehabilitation Unit has been of assistance in enabling handicapped young people to adjust themselves to working conditions and to assess their capabilities. Three girls and 8 boys attended the full course and 1 girl and 3 boys attended the short three-day assessment courses. Two girls and 1 boy have been sent to St. Loyes Training College for the Disabled, at Exeter. The boy, a spina bifida case with one leg amputated, previously attended the South Bristol Open Air School. One girl, who is asthmatic, completed the shorthand-typing course and has found suitable work, and the other girl is being trained for calculating-machine work.

Undoubtedly the most difficult problem is that of the school leavers who suffer from epilepsy and it has been extremely hard to place and keep such young people in employment even though with improved methods of control of fits the risks in employment are much lessened.

Work with E.S.N. Boys

The year was not an easy one, owing to the general employment position created by the petrol shortage and the "credit squeeze." Employers have become far more selective, and as there are sometimes more than sixty boys unemployed and available for work, the less gifted stand very little chance.

It is very disturbing to see boys from residential special schools returning to unco-operative homes upon leaving school. The boys are faced not only with the problem of settling into work but also into a district in which they have no friends. It is very difficult for them to readjust themselves to the same home from which it has already been thought well to remove them. Hostel accommodation would doubtless be valuable in many cases.

E.S.N. Girls

In 1957, 18 girls left the House-in-the-Garden School in Bristol and 5 girls left Croydon Hall Residential School in Somerset.

Just over half of these girls were placed in employment by the Youth Employment Officer, the rest finding work through relations or friends. Only 3 are known to have changed their jobs since leaving school; 2 have been unable

to adapt themselves to working conditions and have been recommended for institutional care, and 1 girl, considered unemployable, has remained at home.

Needlework, domestic work and hand or machine packing appear to be the most suitable occupations for backward girls, who almost invariably find the speed of machine production in a modern factory beyond their capacity. The girls who entered these trades have settled down very well. A few of the seventeen-year-old factory workers have lost their jobs in the past year, and it has become very difficult to replace them in similar employment, owing to the increased speed of production methods in many firms, and also to the recent decline in trade. At the end of 1957, 4 girls were known to be unemployed.

After-Care of Handicapped Children

L. A. Tavener

During the year under review there has been a considerable increase in the number of children placed under voluntary supervision, bringing the Special Schools' Welfare Officer's case load to 185. The number of children referred to the Special Schools' After-care Officer during the year has been greater than those ceasing after-care and this pattern seems likely to continue for the next five years, by which time it is expected a balance will be achieved. One reason for this trend may be that more E.S.N. school leavers are being referred for voluntary supervision rather than to the Mental Health Authority under Section 57 (5) of the Education Act.

The homes of Special School leavers and of those leaving special classes in ordinary schools have been visited in the usual way and reports prepared for the end of term conference on E.S.N. children leaving school. In the spring term 32 homes were visited and 18 children placed under the care of the department; during the summer term 42 homes were visited and 17 children placed under care of the department and in the autumn term 36 homes were visited when 19 children were placed under voluntary supervision. The total figures were: visits to 110 homes from which 54 children were placed under voluntary supervision during the year.

It has not yet been found possible to visit all the children on their admission to Special Schools, but some progress has been made in visiting the leavers at school during their last term.

The Special Schools' Welfare Officer has experienced an increasing difficulty during the year on account of some unemployment among those under her care, making it necessary to pay more frequent visits to the homes and the children in order to maintain the maximum stability possible under such circumstances.

Relationships with other services have been maintained and further developments undertaken in connection with the work at the James Wykeham Club. The adjustments made during the year in the staff of the department have enabled the services of a woman school welfare officer to be made available to assist with this after-care work.

BRISTOL EDUCATION COMMITTEE

Chairman: Alderman R. ST. JOHN READE, O.B.E., M.A.

Vice-Chairman: Alderman MRS. F. M. BROWN

Special Services Committee

Chairman: Alderman MRS. F. M. BROWN

Chief Education Officer

G. H. SYLVESTER, M.A.

Principal School Medical Officer and Medical Officer of Health

R. C. WOFINDEN, M.D., D.P.H., D.P.A.

Deputy Principal School Medical Officer and Deputy Medical Officer of Health

P. G. ROADS, M.D., D.P.H.

Senior Medical Officer, School Health Service

A. L. SMALLWOOD, M.D., D.C.H., D.P.H.

City and County of Bristol

Population (estimated mid-1957)	..	..	..	..	..	..	439,600
Schools:—							
Number of School Departments	..	..	..	..	..	..	227
Average Number on Registers	..	..	..	..	..	..	66,439
Average Attendance	..	..	..	..	..	..	59,512

STAFF

Principal School Medical Officer and Medical Officer of Health

R. C. WOFINDEN, M.D., D.P.H., D.P.A.

Deputy Principal School Medical Officer and Deputy Medical Officer of Health

P. G. ROADS, M.D., D.P.H.

Senior Medical Officer, School Health Service

A. L. SMALLWOOD, M.D., D.C.H., D.P.H.

School Medical Officers

(Joint Appointments with the Local Health Authority)

Mrs. Monica A. Pauli, M.B., Ch.B., B.A.O.
R. J. Irving Bell, M.R.C.S., L.R.C.P., D.P.H.
Mary Gibson, M.B., Ch.B., D.P.H.
A. M. Fraser, L.R.C.P., L.R.C.S., D.P.H.
B. J. Boulton, M.B., Ch.B.
Clara Jahoda, M.D. (Vienna)
Helen M. Gibb, M.B., Ch.B., D.P.H.
J. E. Kaye, Med. Dip. (Warsaw), D.P.H.
S. W. Terry, M.B., B.S., D.T.M. & H., D.P.H.
J. L. S. James, M.R.C.S., L.R.C.P. (Anaesthetist)
Kathleen E. Faulkner, M.B., Ch.B., D.C.H., D.P.H.
D. J. Sheerboom, M.B., B.S.
Mrs. Marjorie Mair, B.Sc., M.B., Ch.B.
H. W. S. Francis, M.A., M.B., B.Chir., D.P.H. (to 20.11.57)
E. Rogan, L.R.C.P.I. & L.M., L.R.C.S.I. & L.M., D.P.H.
P. Tomlinson, M.D., B.S., D.P.H. (from 20.11.57)

Part-time School Medical Officers

H. F. M. Finzel, M.D., B.S.
C. Jean Fraser, M.B., Ch.B., D.P.H.

Consultants—Part-time

Ear, Nose and Throat	..	H. D. Fairman, F.R.C.S.E., D.L.O. J. Freeman, F.R.C.S., D.L.O.
Orthopaedic	.. ..	K. H. Pridie, M.B., B.S., F.R.C.S.* D. M. Jones, M.B., B.S., M.Ch.(Orth.), F.R.C.S.* H. Keith Lucas, M.Ch.(Orth.), F.R.C.S.E.
Ophthalmic	.. ..	R. R. Garden, M.A., M.B., D.O.M.S., D.P.H. R. L. M. Stewart, M.B., Ch.B.* (to 5.7.57) G. Saha, M.B., B.S., D.O. (from 12.9.57)*
Cardio-rheumatic	.. ..	C. Bruce Perry, M.D., F.R.C.P. (by arrangement with United Bristol Hospitals)
Dermatology	.. ..	R. P. Warin, M.D., M.R.C.P.* C. D. Evans, B.A., M.B., B.Ch. (Camb.)*
<hr/>		
Chiropody	.. ..	L. I. W. Tasker, M.Ch.S.
Orthoptist	.. ..	Miss M. J. Smith, D.B.O.*

Dental Surgeons

(Joint Appointments with the Local Health Authority)

Principal School Dental Officer	..	W. H. B. Stride, L.D.S.
School Dental Officers	.. ..	A. H. V. Williams, L.D.S. H. W. Williams, L.D.S. Alice M. Trump, L.D.S. Helena Blinkworth, L.D.S. J. F. Sellin, L.D.S. J. G. James, B.D.S. (to 30.6.57) R. D. Hepburn, L.D.S. W. E. C. Chaplin, L.D.S. G. D. Everard, L.D.S. Elizabeth R. Shinkwen, B.D.S. H. Hazell, L.D.S. (part-time)*
Oral Hygienist	.. ..	Jean E. Bailey

Child Guidance Clinic

Director	.. ..	R. F. Barbour, M.A., F.R.C.P., D.P.M.
Consultant Psychiatrist	.. ..	W. L. Walker, M.B., Ch.B., D.P.H., D.P.M.*
Psychiatric Registrar	.. ..	J. F. Warner, M.B., Ch.B.*
Assistant Psychiatrist	.. ..	Mrs. Doris E. Heron, M.R.C.S., L.R.C.P. (to 30.4.57)
Senior Psychologist	.. ..	R. V. Saunders, M.A., B.Ed.
Senior Assistant Psychologist	.. ..	K. Harrison, Ph.D. (to 31.7.57) W. C. King, B.Sc. (from 1.10.57)
Psychologists	.. ..	C. J. Beedell, B.Sc. (part-time by arrangement with University of Bristol) Eleanor J. Horn, M.A., Dip. Ed. Margaret O'Flynn, B.A.
Senior Psychiatric Social Worker		Mrs. L. Gatliff
Psychiatric Social Workers	.. ..	Berry Harrison Margaret Astley (part-time)

Speech Clinic

Speech Therapists	Kathleen Coleman, L.C.S.T., S.R.N. Beryl Bolwell, L.C.S.T. Rosemary Morris, L.C.S.T.
-------------------	-------	--

Nursing Service

Chief Nursing Officer	.. ..	Miss L. M. Bendall, S.R.N., S.C.M., H.V. Cert.
Deputy Chief Nursing Officer	.. ..	Miss V. P. Bowler, S.R.N., S.C.M., H.V. Cert.

* By arrangement with the Regional Hospital Board.

The following staff changes took place during the year:

Medical

The following resignations and appointments were made during the year in the joint medical staff of the Local Health and Education Authorities.

Resignations	..	H. W. S. Francis, M.A., M.B., B. Chir., D.P.H. (20.11.57) S. W. Terry, M.B., B.S., D.T.M. & H., D.P.H. (31.12.57)
Appointments	..	P. Tomlinson, M.D., B.S., D.P.H. (from 20.11.57) J. G. Moran, L.R.C.P., L.R.C.S., D.C.H., D.P.H. (to commence 1.1.58) G. N. Febry, M.B., Ch.B. (to commence 20.1.58)

Dental

J. G. James, B.D.S., commenced duty on 7th January, 1957, and resigned his appointment at the end of June. Up to the end of the year it had not been possible to make an appointment in his place.

Child Guidance

Dr. Doris Heron resigned her appointment as part-time assistant psychiatrist at the end of April. Arrangements were made for the Regional Hospital Board to fill the vacancy, but up to the end of the year it had not been possible to make an appointment. Dr. K. Harrison, who was appointed as Senior Assistant Psychologist on 1st February, resigned his appointment at the end of July. Mr. W. C. King, B.Sc., was appointed in his place and commenced duty at the Clinic on 1st October, 1957.

Persons other than those whose names appear in the list of staff who have contributed to this report are the following:

- L. A. Tavener, *Superintendent Welfare Officer*
- F. B. Richards, M.B., Ch.B., *Medical Officer-in-Charge, Mass Radiography Unit*
- Miss T. B. Hetherington, *Chief Organiser of School Meals*
- F. J. Redstone, F.R.S.H., F.S.P.H.A., *Chief Public Health Inspector*
- J. MacA. Milne, *Chief Organiser of Physical Education*
- C. Williams, *Head of South Bristol Open Air School*
- B. M. Dyer, M.B.E., B.A., *Youth Employment Officer*
- Mrs. Grace Woods, M.D., D.C.H., D.P.H., *Medical Officer, Cerebral Palsy Assessment Clinic and Claremont School for Spastic Children*
- Miss M. Sharwood, *Head of Elmfield School for the Deaf*
- Miss R. H. Sturman, *Visiting Teacher for Partially Deaf Children*
- Miss M. J. Ram, B.A., *Head of Claremont School for Spastic Children*
- Miss M. Chapman, *Nutritionist, Public Health Department*
- Miss M. Davies, B.A., *Head of Croydon Hall Special School for E.S.N. Girls*
- Miss M. P. English, M.Sc., *Recognised Teacher in Medical Mycology, University of Bristol.*

SCHOOL CLINICS

<i>Name of Clinic</i>	<i>Address</i>	<i>Clinics Held</i>
Central Health Clinic	Tower Hill, Bristol 2. Tel. 2-6602.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic, Orthopaedic, Aural and Dermatological Consultant Clinics, Chiropody Clinic, Enuretic Clinic, Artificial Sunlight Clinic, Tb Contact Clinic, Children's Chest Clinic.
Charlotte Keel Clinic	Claremont Street, Stapleton Road. Tel. 5-1545.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
Bedminster Health Clinic	Wedmore Vale, Bristol 3. Tel. 6-3798	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic and Aural Consultant Clinics.
Granby House Clinic	St. John's Road, Bedminster. Tel. 6-4443.	Minor Ailment Inspection and Treatment.
Speedwell Health Clinic	Whitefield Road, Speedwell, Bristol 5. Tel. 67-3194.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic and Aural Consultant Clinics.
Portway Health Clinic	Shirehampton, Bristol. Tel. Avonm'th 2900.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic and Aural Consultant Clinics.
Southmead Health Clinic	Monks Park Ave., Southmead. Bristol. Tel. 62-6414.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic and Aural Consultant Clinics.
Brooklea Clinic	Wick Road, Brislington. Tel. 7-8861.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
Knowle Health Clinic	Broadfield Road, Bristol 4. Tel. 7-6292.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
Lawrence Weston Clinic	Ridingleaze, Lawrence Weston. Tel. Avonm'th 3205.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
William Budd Health Centre	Leinster Ave., Bristol 4. Tel. 6-1112.	Minor Ailment Inspection and Treatment.
Mary Hennessy Clinic	Hareclive Road, Hartcliffe, Bristol 3. Tel. 6-4282.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
John Milton Clinic	Crow Lane, Brentry, Bristol. Tel. 62-2160.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
Connaught Road School Clinic	Connaught Road School, Bristol 4.	Minor Ailment Treatment.
Verrier Road Clinic	Verrier Road, Redfield. Tel. 5-6387	Minor Ailment Treatment.
Child Guidance Clinic	7 Brunswick Square, Bristol 2. Tel. 2-6181	
Speech Clinics	1 Argyle Road, St. Paul's, Bristol 2. Tel. 2-6760 and Knowle Health Clinic.	

APPENDIX A

Old Girls of Croydon Hall Residential School for E.S.N. Girls

Margaret Davies

The recurring crises of a Residential Special School tend to emphasize the failures and to create a consciousness of utter inadequacy: in these moments it is good to remember that all is not loss.

Of the 170 odd girls and boys who have attended Croydon Hall for long or short periods since 1947, 73 are still in contact with the school. There are frequent letters—not only to members of staff, but also to lonely girls. There is work done for Sales of Work, occasional pocket money for some whose parents are neglectful. There are meetings between old girls and joint greetings sent, photograph exchanges and visits with friends and husbands and children. At Christmas these greetings come in hosts.

A number of the 170 left before they were 16; the boys to a separate school (Croydon Hall was changed to a Senior Girls' School in April, 1948) some on grounds of ineducability, a few taken from us by disapproving parents, some on grounds of inexpediency after scenes of violence, six were transferred to hospital schools and fourteen returned to ordinary school, where most of them have made satisfactory progress. Many of these still write and some visit us.

Of those who have completed their school life here, approximately 30 have been successfully employed in factory work and have retained their jobs. Nine have found useful and happy employment in hospitals and write of their busy and interesting life. The four girls who became cinema usherettes tired the soonest. Four girls are successful shop assistants, three became cooks, two were hotel chambermaids and about twelve are in domestic work of various kinds. One girl is a kennel maid and has been adopted by her employers and another is a chauffeuse and general shopkeeper and church caretaker at a village near the school. Quite a number have married after a reasonable period at work and all these are anxious to make good homes. One old pupil is married to a farmer with much stock and 90 acres of land; she visits us in her own car, her children are well cared for and her fur coat is most elegant. Other married girls are in various parts of the country where their husbands' work has taken them; one, with a spare room, has sent an open invitation to her old friends for week-ends by the sea.

Their letters are full of happy and merry memories and if their spelling is not always orthodox they are none the less interesting. We are charmed to have old girls for holidays and they are delightful guests. Whole parties of them come to Open Day and escort visitors around as if they still were a part of the school, as indeed they are.

The saddest letters come from those girls who have had to spend their time in mental hospitals. Only six leavers have been such a great responsibility that this was the only solution for them; but there are others who have been sent earlier and these too write, also remembering happy days.

I cannot pretend that we know all the histories of all our girls. Some have vanished but of even these now and again we hear a good word.

However long the day, however hard the task, there are no dull moments; and the longer it is our privilege to attempt this work the more sure we are that nothing good is ever entirely lost.

APPENDIX B

School Health during the last Fifty Years

A. L. Smallwood

In this jubilee year of the history of the School Health Service, it is useful to look back and try to assess the advances made in the health of school children over the intervening years. One useful index seems to be the diminution in the number of children of school age dying from disease. Mortality as an index of health seems at first sight to be an odd conception of the progress in child health. It is often cited in relation to infant care but has rarely been used about school children. In examining the causes of death as recorded over the years, it is necessary to try and assess the accuracy of the information that gives rise to these figures. In Table I which follows, the information is taken from the successive annual reports of the Bristol School Health Service from 1913 to 1939 and from 1951 to 1957, in which special mention was made of the number and causes of deaths in school children. Between 1939 and 1951 the data for various reasons are less accurate. There is some little difficulty here with the rubrics because, for example, in the case of tuberculous disease, some categories were grouped together. Indeed, one feels that in the three headings concerned with tuberculous disease, the dominant or presenting symptom has often been the category in which the child's death is placed. As to the accuracy of this application of the cause of death, there is a possibility of error on the part of the certifying doctor, since children's deaths are here classified by only one cause. This is of importance for example in infectious disease and pulmonary disease where the child may be recorded as dying from a pulmonary complication of an infectious disease. One suspects for example that in the early years some deaths attributed to organic heart disease were of rheumatic origin. Certainly of modern times, appendicitis has not been especially noted as a cause of death, and in the period 1913 to 1939 malignant disease almost certainly did not include blood disorders as it has done in recent years. On the other hand, deaths attributed to diphtheria, non-tuberculous meningitis, and violent deaths are almost certainly accurate throughout the period. The method of recording has not changed fundamentally during these years, except in the degree of care taken to ascertain the underlying cause of death. Obviously where there are a greater number of deaths there is rather less care taken and less public concern is felt than at the present time when every one of the few deaths among children is likely to be the subject of much enquiry. Again, it is possible to argue that the total number of school children has varied considerably throughout the period. In fact, this is not so, as will be seen by the figures shown at the foot of the table. Obviously if there are a greater number of young children, the greater will be the number of deaths due to infectious disease. With this reservation it is therefore possible to look at the change in the incidence of deaths amongst school children over the last forty-three years and to see at once that there has been a striking reduction in the total number of children dying whilst of school age. This is of the order of a 90% reduction compared with the earlier years. The maximum mortality amongst school children was in 1918 and this was due to the influenza epidemic of that year, which was reflected in the number of 70 children known to have died from influenza, and a high proportion of the 45 who died from pulmonary disease, some of which was undoubtedly due to earlier influenza. This effect is carried over into the following year, 1919, when 26 deaths were recorded as due to influenza. From an average of about 170-180 deaths per year, a decline started about the mid 20s, but only in 1931 was the figure brought below 100. The average of the last five years is 23.4.

Table I

Deaths of School-children	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929
Enteric	2	4	0	0	0	0	1	0	0	0	0	0	1	1	1	1	1
Diphtheria and croup ..	14	16	14	9	9	16	14	30	59	34	20	24	25	26	15	9	42
Other infectious diseases	10	21	(1) 19	9	(2) 5	(3) 78	(4) 30	6	5	(5) 24	8	10	30	7	10	9	6
Pulmonary tuberculosis	24	16	21	20	34	33	15	11	9	12	10	13	13	7	8	6	5
Tb meningitis ..	17	11	10	14	13	8	7	12	5	6	16	7	14	6			
Other tuberculous disease	7	10	15	11	14	19	10	10	5	8	6	10	9	4	13	12	26
Malignant disease ..	1	1	2	2	0	0	3	1	2	0	0	0	3	0	2	2	0
Rheumatic diseases ..	5	8	4	5	5	6	2	6	7	3	6	9	5	4	3	9	10
Organic heart disease ..	9	18	18	9	6	9	4	10	10	6	8	6	6	5	3	4	3
Meningitis, non Tb ..	14	11	14	12	4	13	7	5	1	5	3	3	2	1	1	1	2
Pneumonia, bronchitis and other pulmonary diseases ..	11	23	33	21	20	45	23	19	10	13	9	14	22	7	11	10	8
Appendicitis and Typhilitis ..	8	3	2	7	12	6	6	2	8	4	3	5	10	6	4	3	5
Acute and chronic nephritis ..	4	4	6	7	5	4	8	4	2	2	2	8	3	4	2	3	2
Violent deaths ..	20	8	32	18	15	26	19	15	18	17	13	16	13	13	12	5	14
Other	33	32	33	39	24	40	43	30	38	44	35	39	26	23	(6) 35	29	26
TOTALS ..	179	186	223	183	166	303	192	161	179	178	139	164	182	114	120	103	150

School population nearest thousand

(1) Inc. 2 smallpox. (2) Inc. 1 erysipelas. (3) Inc. 70 influenza. (4) Inc. 26 influenza. (5) Inc. 10 influenza. (6) Inc. 3 diabetes.

Table 1 (continued)

Deaths of School-children	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1951	1952	1953	1954	1955	1956	1957
Enteric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diphtheria and croup ..	27	13	11	14	8	4	10	3	16	11	0	0	0	0	0	0	0
Other infectious diseases ..	9	3	5	11	3	4	10	7	2	4	1	0	0	3	0	1	1
Pulmonary tuberculosis ..	2	5	4	6	2	6	4	3	2	6	1	0	0	0	0	0	0
Tb meningitis	10	13	2	11	12	3	2	15	7	6	2	1	{	0	1	1	1
Other tuberculous disease ..														1	0	0	0
Malignant disease ..	0	0	2	0	2	2	1	1	2	1	1	2	5	2	6	5	4
Rheumatic diseases ..	11	6	10	6	5	8	9	6	6	7	1	{	1	1	0	2	0
Organic heart disease ..	3	6	1	4	3	1	3	2	1				0	0	0	3	2
Meningitis, non Tb ..	1	4	4	1	1	1	0	0	0	1	0	0	0	1	1	0	0
Pneumonia, bronchitis and other pulmonary diseases..	5	6	10	9	5	6	10	4	3	2	4	2	3	2	0	3	1
Appendicitis and Typhilitis ..	4	3	4	4	5	5	3	2	8	1	0*	0	0	0	0	0	0
Acute and chronic nephritis ..	5	1	0	3	1	3	5	4	8	1	0	1	0	1	0	0	3
Violent deaths ..	18	11	12	11	17	11	19	14	11	9	10	13	9	7	6	5	9
Other	25	19	19	19	34	14	48	25	27	18	10	5	8	4	2	5	6
TOTALS ..	120	90	84	99	98	68	124	86	93	69	30	26	27	22	16	25	27
School population nearest thousand	54	55	56	57	55	54	52	51	50	48	57	60	62	64	65	66	66

* From 1951 included in "other"

It is now possible to examine the principal causes of death in the early years. Diphtheria and croup were responsible for many deaths from about the 1920—1926 period, and the years 1929 and 1930. Under this heading it is a little doubtful whether croup was always laryngeal diphtheria, but it is fair to suppose that this was usually the case. It is of course well known that there has been no case of diphtheria in the City during the last eight years. This is a triumph of preventive medicine. Tuberculosis used to take a heavy toll of child life. Grouping the three heads, pulmonary tuberculosis, T.B. meningitis and other tuberculous diseases together it was not uncommon up to about 1925 to find 30 to 40 children dying every year from these diseases. What is perhaps surprising is that in the early years so many children were recorded as dying from pulmonary tuberculosis, which in the early days before the universal use of X-rays and pathological examinations is a little difficult to accept. This comment is especially valid in view of the practice at that time of school medical officers making a diagnosis of pulmonary tuberculosis at school medical inspections on apparently rather slender grounds. Deaths attributed to non-tuberculous meningitis were quite common during the period of the first world war, but after this time the numbers rapidly fell and this complaint as a cause of death is now rare. It is interesting to note that only in two of the last six years has there been a death from this cause. Violence has always accounted for a number of deaths of school children and is now the greatest single cause. It is common to indict modern transport speed for this but even before the days of heavy traffic on the roads, violence was prevalent as a cause of death amongst school children. Nowadays the commonest individual cause of violent deaths is road accidents. With the smaller number of children of school age now dying, each individual case is looked at very particularly, and it is necessary to make an explanation of malignant disease. This is now the second commonest cause of death in school children but it is not possible to say if there has been an absolute increase in the numbers. In the last few years it is possible that there has been an increase in the number of cases of blood disorders of a malignant nature, such as leukaemia. In spite of modern advances in treatment, rheumatic disease is by no means conquered as a serious affection of children, although there are hopes that it will be in the future. It is a fair comment also to make that many children are now kept alive to school age who would formerly have died in early infancy. Some of these frail children may die during school age of pulmonary disease, or other complications of their original physical handicap so that the figures, low as they are at the present time, could be even lower if this factor could be excluded.

Table 2 gives an analysis of the cases admitted to the Bristol Open Air Schools as physically handicapped children. It demonstrates the reduced power nowadays of tuberculosis to cause crippling disorders. It is interesting that the number of cases of this disorder for whom it was thought desirable to offer admission to the open air school has declined fairly steadily since 1912. The other comment on this table is that there is a steady reduction in the total number of children who need placement as handicapped pupils in the schools for physically handicapped children.

The tables demonstrate to a striking degree the great advance that has taken place in the intervening years, and although nowadays one expects a little more from children than the ability to keep alive, yet the striking decline in mortality in children of 5 to 15 years is, I think, evidence of improved general health and resistance to disease, and of course a commentary on the efficiency of the National and School Health Services. Children between the ages of 5 and 15 are commonly thought nowadays to be a fairly healthy section of the population

and show the lowest mortality of any fraction of the population. In the early years the deaths recorded were among children of school age, i.e. up to 14 years. Now of course since 1945 the school leaving age has risen to 15, but this is not thought to have made any great variation or difference in the conclusions.

Table 2

South Bristol Open Air School for physically handicapped and delicate children

Analysis of Cases on register

		<i>Tb Bones Joints</i>	<i>Paralysis</i>	<i>Rickets</i>	<i>Remainder</i>	<i>Total</i>
1912	..	64	46	10	42	162
1916	..	48	56	20	42	166
1920	..	41	36	11	74	162
1924	..	28	49	4	65	146
1928	..	28	85	4	59	176
1932	..	13	66	4	50	133
1936	..	9	47	10	26	92
1939	..	10	36	2	32	80
1956	..	2	32	0	16	50

APPENDIX C

Menarche

E. Rogan

During the last hundred years there has been a tendency for the time of puberty to occur earlier. It is not easy to measure exactly the period over which puberty extends without performing frequent examinations on children over five or six or even more years, as they pass through the years leading to adolescence. In girls, however, an event occurs which is sufficiently noticeable and by which we can determine the end of puberty and the commencement of adolescence. This event is the onset of menstruation or the menarche.

Little attention has been paid to menarche in this country until comparatively recently, and for evidence that puberty in girls was in fact occurring earlier, one had to turn to the Scandinavian countries and to the United States of America. In Norway in 1850 the age at menarche is given as about 17·1 years, in 1900 as 15·7 years and in 1950 as 13·5 years. Statistics from Sweden, Finland and the United States show that in these countries the menarche is also becoming earlier, and over the period 1850—1950 it would appear to be getting earlier by $\frac{1}{3}$ — $\frac{1}{2}$ year per decade.

In the United Kingdom, a survey carried out in Oxfordshire in 1949 showed the median age at menarche to be 13·6 years, whilst in a further survey in 1950 it was shown that

1 in 100 will menstruate before 10 years 9 months;

1 in 100 will menstruate after 16 years 3 months;

Over half will menstruate by the age of 13 years 6 months.

It was these findings that prompted a survey on the menarche to be made within the School Health Service in Bristol from October 1956 to June 1957. Girls in secondary modern and grammar schools were seen by the health visitor during an ordinary nurse's survey when they were weighed and measured. The age of the girls and whether or not menarche had occurred was all that was required. If, however, the girl had experienced menarche she was invited to try and remember the month and year it first occurred. Altogether 8,032 girls were seen by the health visitors in the nine-month period, and of these 3,288 had commenced menstruation, but 574 could not remember exactly the time of menarche.

The reason for the survey was:

1. To endeavour to find the median age by which Bristol girls begin to menstruate and then to elucidate the percentage of girls who will menstruate whilst still attending primary schools;
2. To find if any differences occur within the City with regard to growth in Bristol girls, and if so, what these differences are and why they occur;
3. To attempt to throw some light on the time of occurrence of menstruation.

It is unfortunate that full results of the survey are not yet complete enough to be included in this report. It would appear, however, that menarche is being experienced at just over 13 years of age by secondary modern school girls in Bristol. Girls attending local authority grammar schools experience the onset of menstruation even earlier.

Results to hand suggest that menarche is influenced by factors operating within the holiday periods of January and August, as far more girls menstruate for the first time in these months than in any other month. This difference is most unlikely to be a chance occurrence and is a highly significant finding. Many girls experience menarche in their birthday month but the influence of this, although significant, does not seem to be as powerful as the holiday incidence.

A full report of this survey will be included in the Annual Report for 1958.

APPENDIX D

Refresher Course for School Medical Officers

A. L. S.

This Refresher Course for School Medical Officers was the second of its kind to be held in Bristol. The School Health Service Group of the Society of Medical Officers of Health who sponsored the course, believes that there are many School Medical Officers, especially those without D.P.H. or other post-graduate qualifications, who would benefit by a course such as this, which would give them a greater understanding of the general principles and practice of the School Health Service. This is a new venture and is the second of its kind, the first having been held in Manchester in April, 1956. The course was held from 25th March to 6th April, 1957, at Wills Hall, one of the halls of residence of Bristol University, situated on the edge of the Downs at Clifton, and twenty-six School Medical Officers from various parts of the country attended. Of these members, eleven had had less than twelve months experience and only four had had over two years experience as School Medical Officers, so that the original plan for attracting the less experienced School Medical Officers was successful. It was a little disappointing that such a relatively small number attended the course, but it is thought that the timing of the course, which was at the end of the Local Authorities' financial year, had an adverse effect on the number who were authorised by their Authorities to attend.

The members and certain visitors were welcomed to the course by the Lord Mayor of Bristol and the Chairmen and Principal Officers of the Health and Education Committees at a dinner on the evening of the first day of the course.

Two excursions were included in the programme of the course, one to the Bristol Zoological Gardens and the other to the Severn Wild Fowl Trust at Slimbridge, and some free time was arranged in the programme for the members for their own social occasions.

The programme was a full one and in fact the strenuous nature of the course provoked a certain amount of comment from the members, who having been away from academic learning for so long found the material a little indigestible at times. The following is a programme of the course.

Monday, 25th March.

- 9.15 a.m. Opening remarks.
"The Health of Bristol."
R. C. WOFINDEN, M.D., B.S., D.P.H., D.P.A., Professor of Public Health, Bristol University. Medical Officer of Health and Principal School Medical Officer, Bristol.
- 10.45 a.m. "Review of the School Health Service."
P. HENDERSON, M.D., D.P.H., Principal Medical Officer, Ministry of Education.
- 2.0 p.m. "Common Skin Conditions."
R. P. WARIN, M.D., M.R.C.P., Consultant Dermatologist, Bristol United Hospitals
- 3.15 p.m. "Defects of Vision."
R. R. GARDEN, M.A., M.B., D.O.M.S., D.P.H., Senior Consultant, Bristol Eye Hospital and Consultant Ophthalmic Adviser, Bristol L.E.A.
- 8.0 p.m. "An Experiment in School Medical Inspection."
A. L. SMALLWOOD, M.D., D.C.H., D.P.H., Senior Medical Officer, School Health Service, Bristol.

Tuesday, 26th March.

- 9.15 a.m. "The Nursery and Pre-School Child."
MISS E. M. PARRY, Inspector, Primary and Nursery Schools,
Bristol L.E.A.
- 10.45 a.m. "The Physiological Development of the Child."
J. M. TANNER, Ph.D., M.D., D.P.M., Senior Lecturer in Physiology,
St. Thomas's Hospital School.
- 2.0 p.m. Visit to the Severn Wild Fowl Trust, Slimbridge, Gloucestershire.
- 8.0 p.m. "The History of Education."
A. PLATTS, O.B.E., M.A., Ph.D., Late H.M.I., Ministry of Education.

Wednesday, 27th March.

- 9.15 a.m. "The Work of the Educational Psychologist in Schools."
R. V. SAUNDERS, M.A., B.Ed., Bristol Child Guidance Clinic.
- 10.45 a.m. "School Dental Work."
A. H. V. WILLIAMS, L.D.S., School Dental Officer, Bristol L.E.A.
- 2.0 p.m. Clinical Session at Bristol Children's Hospital.
A. V. NEALE, M.D., F.R.C.P., D.P.H., Professor of Child Health,
University of Bristol.

Thursday, 28th March.

- 9.15 a.m. "Primary Education."
MISS E. M. PARRY, Bristol L.E.A.
- 10.45 a.m. "Cardiac Conditions in Children."
C. BRUCE PERRY, M.D., F.R.C.P., Professor of Medicine, University
of Bristol.
- Afternoon free.*
- 8.0 p.m. "Education in Other Lands."
E. H. DEHN, B.A., Master, Bristol Grammar School.

Friday, 29th March.

- 9.15 a.m. "Record Keeping."
MISS E. H. L. DUNCAN, M.A., B.Sc., Records Officer, Bristol Health
Department.
- 10.45 a.m. "Common Orthopaedic Conditions."
H. KEITH LUCAS, M.Ch.(Orth.), F.R.C.S., Consultant Orthopaedic
Surgeon, Bristol United Hospitals.
- 2.0 p.m. "Problem Family" discussion.
SARAH C. B. WALKER, M.D., D.C.H., D.P.H., Senior Medical Officer,
Maternal and Child Welfare Service, Bristol.
W. LUMSDEN WALKER, M.B., Ch.B., D.P.H., D.P.M., Consultant
Psychiatrist.
T. JOHNSTONE, B.Sc., D.P.A., Children's Officer, Bristol.
A. STRANGE, Family Service Unit.
- 4.30 p.m. "Music in Schools."
A. VAUGHAN DAVIES, Mus.B., L.R.A.M., Music Adviser, Bristol
L.E.A.
- 8.0 p.m. "The West Country in History."
R. PERRY, M.A., B.Sc., Ph.D., Headmaster, Hengrove Secondary
School, Bristol.

Saturday, 30th March.

- 9.15 a.m. "Normal Development of Speech" and "Speech Therapy."
BERYL BOLWELL, L.C.S.T., Speech Therapist, Bristol L.E.A.
- 10.45 a.m. "The School Meals Service."
MISS T. B. J. HETHERINGTON, Organiser of School Meals, Bristol
L.E.A.
- Afternoon free.*
- 8.0 p.m. "Research Opportunities."
M. E. M. HERFORD, D.S.O., M.D., D.P.H., Appointed Factory
Doctor, Windsor and Slough, Research Committee Con-
vener, School Health Service Group Society of Medical Officers
of Health, part-time S.M.O., Bucks. C.C.

Monday, 1st April.

- 9.15 a.m. "Secondary Education I."
K. LAYBOURN, Ph.D., M.Sc., Chief Inspector of Schools, Bristol L.E.A.
- 10.45 a.m. "Common Chest Conditions."
A. T. M. ROBERTS, M.D., M.R.C.P., Consultant Chest Physician, Bristol Chest Clinic and Ham Green Hospital, Bristol.
- 2.0 p.m. "Physical Education in Schools and Demonstration."
Miss C. E. COOKE, Senior Woman Organiser of Physical Education, Bristol L.E.A.
- 8.0 p.m. "Cerebral Physiology and Electro-Encephalography."
W. GREY WALTER, M.A., Sc.D., Director, Physiology Department, Burden Neurological Institute.

Tuesday, 2nd April.

- 9.15 a.m. "The Psychological Development of the Child."
R. F. BARBOUR, M.A., F.R.C.P., D.P.M., Consultant Psychiatrist, Bristol United Hospitals and Director, Bristol Child Guidance Clinic.
- 10.45 a.m. "The Psychological Development of the Child."
R. V. SAUNDERS, M.A., B.Ed., Senior Psychologist, Bristol Child Guidance Clinic.
- 2.0 p.m. "The E.S.N. Child."
R. V. SAUNDERS, M.A., B.Ed.
Miss J. DAVIS-MORGAN, Head, Henbury Manor Special School, Bristol.
B. J. BOULTON, M.B., Ch.B., Medical Officer, Bristol L.E.A.
- 8.0 p.m. "Paediatrics in History."
PROFESSOR A. V. NEALE, M.D., F.R.C.P., D.P.H., University of Bristol.

Wednesday, 3rd April.

- 9.15 a.m. "Secondary Education II."
K. LAYBOURN, Ph.D., M.Sc., Bristol L.E.A.
- 10.45 a.m. "The Control of Communicable Diseases."
PROFESSOR R. CRUICKSHANK, M.D., F.R.C.P., D.P.H., Professor of Bacteriology, University of London.
- 2.0 p.m. Visit to Bristol Zoological Gardens.
H. L. SHEPHERD, M.B., Ch.M., F.R.C.O.G.

Thursday, 4th April.

- 9.15 a.m. "School Medical Inspection."
CECILE H. D. ASHER, M.D., M.R.C.P., D.C.H., Medical Officer, Ministry of Education.
- 10.45 a.m. "Deaf Children."
Miss M. SHARWOOD, Head, Elmfield School for Deaf Children, Bristol.
- 2.0 p.m. "Child Guidance Technique and Demonstration."
R. F. BARBOUR, M.A., F.R.C.P., D.P.M., Bristol L.E.A.
- 8.0 p.m. "How to Lecture."
GORDON RANKIN, staff lecturer, London Abbey School for Speakers.

Friday, 5th April.

- 9.15 a.m. Special Subjects Discussion.
- 2.0 p.m. "Health Education."
D. LYNTON PORTER, Education Officer, Central Council for Health Education.
JOHN BURTON, B.A., M.R.C.S., D.P.H., Medical Director, Central Council for Health Education.
- 8.0 p.m. Criticism.

Saturday, 6th April.

Disperse.

We were fortunate in having Dr. Henderson, Principal Medical Officer of the Ministry of Education, who gave the opening lecture and to have the constant attendance of Dr. Llewellyn, Senior Medical Officer of the Ministry of Education, to act as tutor and guide throughout the course. The course was also greatly assisted by the visit of Dr. Alford, Senior Medical Officer of the Ministry of Education, and by the lecture given by Dr. Asher of the Ministry of Education. The lectures most appreciated by those attending the course, were particularly those of Dr. Grey Walter and Dr. Tanner on medical subjects, and Dr. Perry and Mr. Dehn on non-medical topics. Members of the course were also very appreciative of Professor Neale's two lectures and his general help in the course. The members found the lecture on the Psychological Development of the Child rather hard going and one cannot help feeling that this is a reflection on the general lack of training in the Mental Health field.

This course was arranged on the traditional lines of lectures with discussion periods at the end of each lecture. The general plan was to have talks on two subjects in the morning session and a lecture in the evening after dinner with the afternoon reserved for symposia, visits or free time. An attempt was made for one of these lectures after dinner to be of a lighter but nevertheless of apposite character to the main theme of the course. Visits were used as little as possible because it was felt that so much valuable time was lost, but demonstrations were brought to the course. Much time was given to matters of educational importance and lectures on the educational side were carefully spaced throughout the two weeks of the course. This very important feature was given prominence because too often School Medical Officers have little appreciation of the work that goes on in schools. With the thirty-seven lectures and demonstrations in the programme it was almost inevitable that there would be some defections on the part of lecturers. In fact only one lecturer was unable to appear and only one other lecture had to be postponed for unavoidable reasons.

Conclusions

The course on the whole was greatly appreciated by those attending for its content and scope. It took some time for the members to settle down to the rhythm of learning which many of them had not experienced for some years. Some of the lectures were, by intent, aimed slightly above their heads. It is important, however, to appreciate that in a course such as this unless the individuals go away wishing to learn more, the true purpose of the course has failed. Although this course was arranged in the accepted pattern of authoritative lectures by experts, it may well be that in future courses a different pattern may have to be adopted, involving more discussion, but it is not yet certain that doctors in general would relish or would wish to take part in this newer method of learning. Not the least enjoyment was felt by those organising the course who, though at the end somewhat weary, nevertheless learnt much themselves.

APPENDIX E
STATISTICAL TABLES
Year Ended 31st December, 1957

**Table I. Medical Inspection of Pupils Attending
Maintained Primary and Secondary Schools**

(including Special Schools)

A.—Periodic Medical Inspections

1956	Age Groups inspected and number of pupils examined in each:—						1957
6,378	Entrants	..	..	..	..	..	4,225
4,210	Second Age Group	..	..	..	..	..	5,687
4,597	Third Age Group	..	..	..	..	..	4,487
15,185	TOTAL						14,399
3,292	Number of additional periodic inspections						3,399
18,477	GRAND TOTAL						17,798

B.—Other Inspections

25,640	Number of Special Inspections	..	..	..	..	22,708
26,197	Number of Re-inspections	..	..	..	..	25,718
51,837	TOTAL					48,426

C.—Pupils Found to Require Treatment

**Number of Individual Pupils Found at Periodic Medical
Inspection to Require Treatment**

(Excluding Dental Diseases and Infestation with Vermin)

1956			1957		
For Def. Vision*	For any other condn.	Total Individ. Pupils	For Def. Vision*	For any other condn.	Total Individ. Pupils
43	429	464	Entrants	..	..
92	207	289	Second age group	..	..
157	151	300	Third age group	..	..
292	787	1,053	Total (prescribed groups)	242	757
108	92	195	Other Periodic Inspections	96	124
400	879	1,248	GRAND TOTAL	338	881
					1,197

* excluding squint.

**D.—Classification of the Physical Conditions of
Pupils Inspected in the Age Groups Recorded in Table I.A**

Age Groups Inspected				Number of Pupils Inspected	Satisfactory		Unsatisfactory	
					No.	% of Col. (2)	No.	% of Col. (2)
(1)	(2)	(3)	(4)	(5)	(6)			
Entrants	4,225	3,985	94.3	240	5.7			
Second Age Group	5,687	5,450	95.8	237	4.2			
Third Age Group	4,487	4,327	96.5	160	3.5			
Additional Periodic Inspections	3,399	3,264	96.0	135	4.0			
TOTAL				17,798	17,026	95.7	772	4.3
1956 TOTAL ..				18,477	17,508	94.8	969	5.2

Table 2. Infestation with Vermin

1956		1957
117,566	(i) Total number of examinations of pupils in schools by the school nurses or other authorised persons	119,230
2,133	(ii) Total number of individual pupils found to be infested	1,841
301	(iii) Number of individual pupils in respect of whom cleansing notices were issued (Section 54 (2), Education Act, 1944)	421
57	(iv) Number of individual pupils in respect of whom cleansing orders were issued (Section 54 (3), Education Act, 1944)	78

Table 3. Return of Defects Found by Medical Inspection in the Year ended 31st December, 1957**A.—Periodic Inspections**

1956				Periodic Inspections				1957 Total (including all other age groups inspected).	
No. of defects		Defect or Disease		Entrants		Leavers			
Req. treatment	Req. obs. but not treatment	(2)		Req. treatment	Req. obs.	Req. treatment	Req. obs.	Req. treatment	Req. obs.
		(2)		(3)	(4)	(5)	(6)	(7)	(8)
94	37	Skin .. ..	..	27	22	44	1	146	57
400	109	Eyes—(a) Vision ..	..	40	16	107	22	338	124
25	14	(b) Squint ..	..	20	8	5	8	35	16
3	11	(c) Other ..	..	5	5	2	1	13	12
22	14	Ears—(a) Hearing ..	..	9	12	11	7	35	33
22	26	(b) Otitis Media ..	..	11	26	12	1	39	43
6	13	(c) Other ..	..	1	4	1	—	2	6
188	324	Nose and Throat ..	..	81	249	25	13	202	394
16	62	Speech ..	..	13	23	3	—	26	27
16	114	Lymphatic Glands ..	..	15	147	1	1	37	216
25	63	Heart ..	..	13	23	16	—	42	67
85	129	Lungs ..	..	33	71	8	7	77	147
—	—	Developmental:							
—	—	(a) Hernia ..	..	5	9	3	—	17	20
—	6	(b) Other ..	..	11	65	8	11	29	200
16	44	Orthopaedic:							
8	14	(a) Posture ..	..	5	28	18	11	51	106
91	157	(b) Feet ..	..	3	11	5	1	20	38
—	—	(c) Other ..	..	7	36	22	7	65	91
2	1	Nervous System:							
8	72	(a) Epilepsy ..	..	1	5	1	2	2	11
—	—	(b) Other ..	..	3	23	7	7	17	80
12	13	Psychological:							
—	—	(a) Development ..	..	10	10	—	—	20	27
—	—	(b) Stability ..	..	15	45	3	2	43	103
—	—	Abdomen ..	..	5	7	1	2	14	22
688	473	Other ..	..	126	71	185	11	698	174

B.—Special Inspections

1956		Defect or Disease	1957	
<i>No. of Defects Requiring treatment</i>	<i>Requiring observation</i>		<i>No. of Defects Requiring treatment</i>	<i>Requiring observation</i>
4,359	52	Skin	4,549	14
1,369	135	Eyes—(a) Vision	1,205	50
77	10	(b) Squint	24	7
579	9	(c) Other	622	14
81	11	Ears—(a) Hearing	47	6
87	19	(b) Otitis Media ..	58	11
361	21	(c) Other	256	2
483	189	Nose and Throat	356	93
41	34	Speech	34	11
22	56	Lymphatic Glands	21	40
17	32	Heart	16	14
119	104	Lungs	59	46
—	—	Developmental:		
		(a) Hernia	6	7
14	1	(b) Other	41	34
		Orthopaedic:		
29	27	(a) Posture	18	30
32	12	(b) Feet	33	9
376	78	(c) Other	273	31
		Nervous System:		
2	1	(a) Epilepsy	9	11
56	70	(b) Other	41	20
		Psychological:		
33	22	(a) Developmental ..	27	8
18	—	(b) Stability	24	37
—	—	Abdomen	3	5
5,379	276	Other	5,244	68

Table 4**Treatment of Pupils Attending Maintained Primary and
Secondary Schools (including Special Schools)****Group I—Eye Diseases, Defective Vision and Squint**

<i>No. of Cases dealt with 1956</i>			<i>No. of Cases known to have been dealt with 1957</i>	
<i>By the Authority</i>	<i>Otherwise</i>		<i>By the Authority</i>	<i>Otherwise</i>
1,250	—	External and other, excluding errors of refraction and squint	1,216	—
6,197	—	Errors of refraction (including squint)	5,570	—
7,447	—	Total	6,786	—
2,486	—	Number of pupils for whom spec- tacles were prescribed	2,497	—

Group 2—Diseases and Defects of Ear, Nose and Throat

<i>No. of Cases dealt with 1956</i>			<i>No. of Cases known to have been dealt with 1957</i>	
<i>By the Authority</i>	<i>Otherwise</i>		<i>By the Authority</i>	<i>Otherwise</i>
—	24	Received operative treatment	—	19
—	2,095	(a) for diseases of the ear ..	—	1,201
—	138	(b) for adenoids and chronic ton-	—	
576	141	sillitis	547	62
		(c) for other nose and throat con-		
		ditions		
		Received other forms of treatment		
576	2,398		547	1,456
Total number of pupils in Schools who are known to have been pro- vided with hearing aids				
		(a) in 1957	—	17
		(b) In previous years	3	72

Group 3.—Orthopaedic and Postural Defects

<i>1956</i>			<i>1957</i>	
<i>By the Authority</i>	<i>Otherwise</i>		<i>By the Authority</i>	<i>Otherwise</i>
436	200	Number of pupils known to have been treated at clinics or out-patients departments	340	276

Group 4.—Diseases of the Skin (excluding uncleanliness for which see Table 2.)

<i>1956</i>		<i>Number of cases treated or under treatment during the year by the Authority</i>					<i>1957</i>
—	Ringworm— (i) Scalp .. .. .	..	..	..	..	..	—
360	(ii) Body .. .. .	..	..	..	..	..	272
54	Scabies .. .. .	..	..	..	..	..	42
282	Impetigo .. .. .	..	..	..	..	..	281
3,877	Other skin diseases .. .. .	..	..	..	..	..	4,306
4,573	TOTAL .. .. .	..	..	..	..	..	4,901

Group 5.—Child Guidance Clinic

<i>1956</i>		<i>1957</i>
336	Number of pupils treated at Child Guidance Clinics under arrangements made by the Authority	329

Group 6.—Speech Therapy

<i>1956</i>		<i>1957</i>
231	Number of pupils treated by Speech Therapists under arrangements made by the Authority	335

Group 7.—Other Treatment given

<i>1956</i>		<i>1957</i>
9,324	(a) Number of cases of miscellaneous minor ailments treated by the Authority	10,334
56	(b) Pupils who received convalescent treatment under School Health Service arrangements	10
3,279	(c) Pupils who received B.C.G. vaccination	2,841
	(d) Other than (a), (b), and (c) above	
1,275	(1) Chiropody Clinic	758
142	(2) Ultra Violet Light	148
304	(3) Enuretic Clinic	266
928	(4) T.B. Contact Clinic	797
287	(5) Skin (including Wart Clinic)	423
<hr/> 15,595	TOTAL—(a)—(d)	<hr/> 15,577

Table 5

Dental Inspection and Treatment carried out by the Authority

1956		1957
	(1) Number of pupils inspected by the Authority's Dental Officers	
39,624	(a) at Periodic Inspections	45,187
6,777	(b) as specials.. .. .	6,147
46,401	Total (1)	51,334
33,711	(2) Number found to require treatment	35,976
30,619	(3) Number offered treatment	31,567
18,393	(4) Number actually treated	17,410
43,594	(5) Number of attendances made by pupils for treatment including those recorded at heading 11 (h) ..	44,529
274	(6) Half days devoted to:	
4,617	Periodic (School) Inspections	326
	Treatment	4,891
4,891	Total (6)	5,217*
16,616	(7) Fillings: Permanent teeth	16,942
2,427	Temporary teeth	2,669
19,043	Total (7)	19,611
14,268	(8) Number of teeth filled: Permanent teeth ..	16,121
1,749	Temporary teeth ..	2,599
16,017	Total (8)	18,720
6,825	(9) Extractions: Permanent teeth	7,102
17,728	Temporary teeth	17,731
24,553	Total (9)	24,833
11,326	(10) Administration of general anaesthetics for extraction	11,919
	(11) Orthodontics:	
547	(a) Cases commenced during the year	636
249	(b) Cases carried forward from previous year ..	188
48	(c) Cases completed during the year	44
—	(d) Cases discontinued during the year	—
—	(e) Pupils treated with appliances	—
—	(f) Removable appliances fitted	—
—	(g) Fixed appliances fitted	—
852	(h) Total attendances	824
104	(12) Number of pupils supplied with artificial dentures	104
9,810	(13) Other operations: Permanent teeth	11,182
7,564	Temporary teeth	5,324
17,374	Total (13)	16,506

* In addition 639 half days were given to the treatment of mothers and young children. (1957). (503, in 1956).

The figures given under (11) Orthodontics refer to work done at the diagnostic clinic held at the Authority's Central Clinic. Children requiring treatment with appliances are referred to the Bristol Dental Hospital for further treatment and provision of the necessary appliances. The cases completed (c) are those that were dealt with at the clinic by extractions.

School Clinics

<i>1956 No. of attend- ances</i>		<i>Work</i>	<i>1957 No. of attend- ances</i>
	Central Health Clinic	Inspection clinic; treatment of minor ailments; ear, nose and throat clinic; dental treatment; orthodontic treatment; oral hygienist; refraction clinic; asthma clinic; enuretic clinic; T.B. contact clinic; treatment of scabies cases; orthopaedic clinic; remedial exercises; electrical treatment; physiotherapy, massage and foot treatment; artificial sunlight treatment ..	33,178
40,310	Brooklea Clinic	Inspection clinic; treatment of minor ailments	8,694
10,390	Bedminster Health Clinic	Inspection clinic; treatment of minor ailments; ear, nose and throat clinic, dental treatment; and refraction clinic ..	18,811
18,752	William Budd Health Centre	Inspection clinic; treatment of minor ailments	625
1,050	Granby House Clinic	Inspection clinic; treatment of minor ailments	4,626
6,037	Lawrence Weston Clinic	Inspection clinic; treatment of minor ailments; dental treatment	2,377
1,849	Knowle Health Clinic	Inspection clinic; treatment of minor ailments	11,019
9,546	Speedwell Health Clinic	Inspection clinic; treatment of minor ailments; ear, nose and throat clinic; dental treatment and refraction clinic	18,806
19,500	Verrier Road Clinic	Treatment of minor ailments	4,127
3,765	Portway Clinic	Inspection clinic; treatment of minor ailments; ear, nose and throat clinic; dental treatment and refraction clinic	15,564
14,998	Southmead Clinic	Inspection clinic; treatment of minor ailments; ear, nose and throat clinic; dental treatment and refraction clinic	21,219
23,920	Charlotte Keel Clinic	Inspection clinic; treatment of minor ailments; dental treatment	8,938
5,907	Mary Hennessy Clinic	Inspection clinic; treatment of minor ailments; dental treatment	5,122
280	John Milton Clinic	Inspection clinic; treatment of minor ailments; dental treatment	989
122	Connaught Road School Clinic	Treatment of minor ailments	13,613
11,553	Day E.S.N. Special Schools	Treatment of minor ailments	1,307
350	Novers Open Air School	Remedial exercises and massage; treatment of minor ailments	11,922
12,888	Cardio-Rheumatic Clinic	Cases of heart disease and rheumatic disease	732
780	Child Guidance Clinic	.. .. .	2,682
2,876	Speech Clinics	.. .. .	4,438
4,832	Dental Hospital	.. .. .	1,067
1,018			
190,723	Total Attendances	.. .. .	189,856

